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ABSTRACT

This group of eight bulletins provides abstracts on research relating to children reported to the Clearinghouse for Research in Child Life from July 1962 to August 1968. Abstracts are organized by topic area: (1) "Long Term Research"; (2) "Growth and Development," including general, physical, perceptual, cognitive, motor, communication, learning, intelligence, and social development; (3) "Personality and Adjustment," including assessment, processes and factors, emotional and personality disturbances, and delinquency; (4) "Educational Process," including general, achievement, aptitude, school adjustment, specific skills, and special education; (5) "Exceptional Children," including gifted, retarded, and physically handicapped; (6) "The Child in the Family," including family background and child-rearing attitudes and practices; (7) "Social, Economic, and Cultural Influences"; (8) "Health Services and Surveys"; and (9) "Social Services." Each abstract presents the study's purpose, subjects, methods, findings, duration, investigator(s), cooperating group(s), and publication information. The abstracts are indexed by Organization Name, Investigator Name, and Topic Area to facilitate searching. The Bulletin's Research Notes section lists current funding opportunities, research organizations, and additional publications. Issues also include a list of other abstracting journals and services. (KDFB)

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bulletin no. 16

RESEARCH relating to CHILDREN

U.S. DEPARTMENT
of HEALTH,
EDUCATION,
and WELFARE
Welfare Administration
Children's Bureau

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RESEARCH relating to CHILDREN

bulletin 16

studies in progress on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIAL, ECONOMIC, and CULTURAL INFLUENCES
- HEALTH SERVICES and SURVEYS
- SOCIAL SERVICES and SURVEYS

July 1962 - January 1963

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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FOREWORD

This Bulletin like previous issues, includes reports of research in progress or research very recently completed. It does not report again studies included in Bulletin 3 through 15 even though they are still continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse July 1, 1962 through January 31, 1963.

The Clearinghouse has only such information about the research projects as the abstracts provide. Publication references and plans are given for some of the projects, but the Clearinghouse cannot attempt to keep track of the final publication of the studies. The reader who wishes to obtain further information about any of the projects reported should write directly to the investigator or check professional journals in the appropriate field.

For the Clearinghouse, I wish to thank those who have submitted reports and to acknowledge the valuable assistance of the National Council on Crime and Delinquency, the Science Information Exchange of the Smithsonian Institution, the Clearinghouse on Morbidity Statistics Projects of the U. S. Public Health Service, and the several foundations which provide us with information about recent research grants.

Katherine B Oettinger

Katherine B. Oettinger
Chief, Children's Bureau

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 143 is a form for letting us know of other investigators who are working in the field. Page 145 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

8

LONG-TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

16-A-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.

Subjects: Approximately 100 middle class families in Denver, Colorado, including 185 offspring of whom 41 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)

Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant and child; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.

Publication references: Appropriate medical or scientific journals every year. Publication lists available.

Initiation date: 1927.

Principal investigator: Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver 20, Colo.

Cooperating groups: University of Colorado; Commonwealth Fund; Field Foundation; National Association for Mental Health; Nutrition Foundation; National Live Stock and Meat Board; Gerber Baby Foods Fund; Lawrence Phipps Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-A-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Principal investigator: Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

16-A-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Principal investigator: Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group: Public Health Service, U. S. Department of Health, Education, and Welfare.

16-A-4 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (32 years).
Subjects: Full term, healthy newborns, born in Berkeley, California, hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above average group. 50 offspring of these subjects, age range from a few months to about 13 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs and skeletal X-rays taken at most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.
Publication references: Studies in the Development of Young Children, University of California Press, 1940. Growth Diagnosis, University of Chicago Press, 1959. Child Development 12:167-173, 1941; 27:45-74, 1956. American Psychologist 10:805-818, 1955. Others in Journal of Pediatrics, Child Development, and psychological journals.
Initiation date: 1928.
Principal investigators: Nancy Bayley, Ph.D., Chief, Section on Child Development, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C.; Mrs. Dorothy H. Eichorn, Ph.D., Associate Research Psychologist, Institute of Human Development, University of California, Berkeley, Calif.
Cooperating group: Institute of Human Development, University of California.

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16-A-5 NUTRITION AND CHEMICAL GROWTH IN CHILDHOOD

Purpose: To investigate body composition during childhood, mineral metabolism in childhood in relation to growth, maturation, and density of bones.

Publication references: Nutrition and Chemical Growth in Childhood, Vols. I-III, Charles C. Thomas. Human Biology, September 1946. Book, University of Chicago Press, 1956-57. Some papers will be published in scientific journals.

Initiation date: 1930.

Principal investigator: Icie Macy Hoobler, Ph.D., Sc.D., Consultant, Merrill-Palmer Institute, Detroit, Mich.

Cooperating groups: Kresge Foundation; Nutrition Foundation; Swift and Company Foundation; Williams-Waterman Foundation; Public Health Service, U. S. Department of Health, Education, and Welfare.

16-A-6 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semiannual follow-up of more than 2,000 children registered at the Institute.

Methods: School Series: initially based on 600 school children in 5 schools (now 22 schools), ages 6-12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays.

American Negro Series: 150 Negro children with normal occlusion selected to study with a view to establishing tentative standards of facial growth.

Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc.

Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made.

Orthodontic Treatment Series: a small pilot study of 15 white boys, age 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment.

Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate.

Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as facio-dental growth dysplasia.

Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern.

Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional stability, and other aspects of classroom behavior to see if there is any real correlation.

Initiation date: 1947.

Principal investigator: Wilton M. Krogman, Ph.D., Director, Institute for Child Study of Philadelphia, Philadelphia, Pa.

Cooperating groups: Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

16-A-7 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.

Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Publication references: Recent articles: Radiology, April 1961; July 1962; Journal of Dental Research, July-August 1961; July-August 1962. Human Biology, February and September 1962.
Initiation date: 1950.
Principal investigator: Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland 1, Oreg.
Cooperating groups: University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-A-8 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4483 Cleveland children; 134 Boston children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to provide standards of reference.
Publication references: Current standards: Radiographic Atlas of Skeletal Development of Elbow and Shoulder; Radiographic Atlas of Skeletal Development of Hip. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.
Duration: 1948-1964.
Principal investigators: S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., Professor and Head, Department of Anatomy, Stanford University, Stanford, Calif.
Cooperating groups: Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.

16-A-9 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 16 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Publication references: Johns Hopkins Magazine, June 1959.
Initiation date: 1956.
Principal investigators: Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education,

and Welfare, Washington, D. C. Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Oreg.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.

16-A-10 RESEARCH ON SPEECH AND LANGUAGE DISORDERS

Purpose: To investigate etiology, prevention, and rehabilitation in speech and language disorders of children with cerebral palsy, aphasia, cleft palate, endocrine disorders, Mongolism, or mental deficiency.
Subjects: Study group chosen from clinical population, approximately 1,500 cases, and matched with normal controls.
Methods: Basic studies on anatomy and functional laryngx, respiration, etc., including X-ray measurements and similar techniques; various other research methods (generally behavioral items) depending upon area under study.
Publication references: Articles appearing regularly in Journal of Speech and Hearing Disorders, Journal of Speech and Hearing Research, Cerebral Palsy Review, etc.
Initiation date: 1934.
Principal investigator: Martin F. Palmer, Sc.D., Director, Institute of Logopedics, 2400 Jardine Dr., Wichita 19, Kans.
Cooperating group: Federally supported.

16-A-11 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Publication references: Published in Union College Studies in Character Research. Also Dimensions of Character, Macmillan, 1956.
Initiation date: 1936.
Principal investigator: Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group: Lilly Endowment, Inc.

GROWTH AND DEVELOPMENT

General

16-B-1 ROLE OF NEONATAL CHARACTERISTICS IN LATER DEVELOPMENT

Purpose: This pilot study aims to prepare for a longitudinal investigation which is to explore the role neonatal modes of handling stimuli may have in adaptive or pathogenic development. Relevant problems for investigation are the relationship of such modes to defense choice; to cognitive style; and to the individual character in which a child will experience psychosexual and other maturational tasks. Specific aims of the pilot study are: (1) to try out methods of testing neonatal modes of handling stimuli which could also be applied to older children; and (2) to commence establishment of a baseline of neonatal differences in sensory sensitivity and reaction patterns.
Duration: November 1961-indefinite.
Principal investigator: Anneliese F. Korner, Ph.D., Senior Psychologist, Mt. Zion Hospital and Medical Center, 1600 Divisadero St., San Francisco 15, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Physical

16-C-1 INFANT FEEDING PATTERNS OF OVERWEIGHT AND UNDERWEIGHT CHILDREN

Purpose: To determine if there is any relationship between infant feeding patterns and subsequent body weight in childhood.
Subjects: Patients in a city health department nutrition clinic.
Methods: Overweight, underweight, and normal weight patients and their parents are interviewed concerning their infant feeding patterns.
Findings: Preliminary impression: no difference between overweight and underweight subjects in respect to infant feeding habits.
Publication plans: Pediatric journal publication planned.
Duration: 1957-1962.
Principal investigator: Robert W. Hillman, M.D., M.P.H., Professor, Department of Environmental Medicine and Community Health, State University of New York Downstate Medical Center, 450 Clarkson Ave., Brooklyn 3, N. Y.
Cooperating group: Bureau of Nutrition, New York City Department of Health.

16-C-2 FINGERNAIL GROWTH IN RELATION TO BODY GROWTH

Purpose: To determine if any correlation exists between fingernail growth rate and ratio of increase in height and weight.
Subjects: Patients, age 5 to 15, in a health department nutrition clinic.
Methods: Fingernail growth rates (for first and third digits) and body weight are measured at four-week intervals. Height is measured at six-month intervals (or less). Data are analyzed for possible relationship.
Publication plans: Probably in a pediatric journal.
Duration: 1962-1963.
Principal investigator: Robert W. Hillman, M.D., M.P.H., Professor, Department of Environmental Medicine and Community Health, State University of New York Downstate Medical Center, 450 Clarkson Ave., Brooklyn 3, N. Y.
Cooperating groups: Red Hook Health Center Nutrition Clinic, New York City Department of Health; Institute of Nutrition Services, Columbia University.

16-C-3 GROWTH AND DEVELOPMENT OF THE DENTURE OF "NORMAL" CHILDREN WITH "NORMAL" OCCLUSION

Purpose: To provide a baseline for comparison of growth study of handicapped children and of children with malocclusion.
Subjects: Patients with primary and/or mixed dentition showing normal occlusion applying for treatment in the pedodontic and orthodontic clinics.
Methods: Sites, direction, and amount of growth to be determined from yearly cephalometric roentgenographic tracings and study models.
Duration: September 1961-indefinite.
Principal investigator: Sidney Kronfeld, D.D.S., Associate Professor of Pedodontics, New York University College of Dentistry, New York, N. Y.

Perceptual, cognitive, and motor

16-D-1 DEVELOPMENTAL NORMS FOR CERTAIN AUDITORY TASKS

Purpose: To establish developmental norms for certain listening tasks in children from age 6 months to 54 months.
Subjects: Normal children, age 6 to 54 months.
Methods: Subjects participated in 11 listening tasks which ranged from awareness of auditory stimuli to differential and sequential response to sound. Norms by age were established.
Publication plans: Publication is planned within the next few months.
Duration: February 1960-March 1963.
Principal investigators: Vincent H. Knauf, Ph.D., Audiologist, Indiana University, Bloomington, Ind.; John V. Irwin, Ph.D., Professor of Speech and Director, Speech and Hearing Clinics, and Claude S. Hayes, Ph.D., Associate Professor of Speech, University of Wisconsin, Madison, Wis.

16-D-2 CHILDREN'S RESPONSES TO NOVEL AND COMPLEX STIMULI

Purpose: To determine whether, under specified experimental conditions, children and infants prefer novelty to familiarity and complexity to simplicity; also, to determine if exposure to novel and complex stimulation arouses drive states in such subjects.
Subjects: Infants two to four months and six to eight months; preschool children three to five years; elementary school children, fourth and fifth graders; kindergarten children.
Methods: Preliminary work (two completed studies) has demonstrated a preference in preschool children for complexity as opposed to simplicity of visual stimulation and a preference in kindergarten children for novel as opposed to familiar visual stimulation.
Publication references and plans: The complexity study is in press in Child Development; the novelty study has been submitted to Child Development; about six future studies in this project will be submitted to appropriate psychological or child development journals if they are considered publishable.
Duration: September 1961-September 1964.
Principal investigators: Gordon N. Cantor, Ph.D., Associate Professor of Child Psychology, and Joan H. Cantor, Ph.D., Iowa Child Welfare Research Station, State University of Iowa, Iowa City, Iowa.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-D-3 RELATIONSHIPS AMONG MEASURES OF VISUAL PERCEPTION AND HYPERACTIVITY IN ELEMENTARY SCHOOL CHILDREN

Purpose: To determine relationships among measures of visual perception and hyperactivity in elementary school children including those referred with special problems. A number of tests of visual perception are available. These have shown promise in detecting organicity. Hyperactivity is believed to be one of the major concomitants of brain injury that must be delt with in school programming. Research is an attempt to circumvent many of the problems associated with the concept of brain injury by focusing on hyperactivity of children.
Subjects: Approximately 125 subjects from elementary school classes.
Methods: A detailed rating schedule will be selected to measure hyperactivity. Separate laboratory procedures to measure the major characteristics of hyperactivity as reported in the literature will be selected. The more promising tests of visual perception (including Syracuse Visual Test, Ellis Designs, Marbleboard Test, and Graman-Kendal Test) will be used. Relationships among measures of hyperactivity and measures of visual perception will be determined.
Duration: August 1962-July 1964.
Principal investigators: Matthew J. Trippe, Ph.D., Associate Professor of Special Education Bobby E. Palk, Instructor, Department of Special Education, and Sadye Tune Brooks, Ph.D., Research Associate, George Peabody College for Teachers, Nashville 5, Tenn.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-D-4 THE PROCESS OF ADAPTATION IN THE HUMAN INFANT IN THE FIRST SIX MONTHS OF LIFE

Purpose: To use controlled observations and experimental techniques to explore the question of how sensory-motor abilities are mastered during the infant's day-by-day transactions with his environment in the first six months of life. Previous results of studies by R. Held and others with animals and adult humans suggest that visual-motor development depends upon self-induced movements in dependable, stimulus-rich environments. In addition, they have identified some of the components of movement required for adaptation and development. Still other studies have revealed some of the interrelationships between systems of coordination such as prehension and egocentric localization. It is planned to test the relevance of the findings to the early development of infants.
Subjects: Institutionally-reared infants to be studied are kept in circumstances which, according to our laboratory findings, tend to impede their sensory-motor development. Their visual surrounds are impoverished and their movements limited.
Methods: Institution of procedures designed to enhance the development of various sensory-motor capacities and to test the validity of theoretical views. Furthermore, it is hoped to evaluate the views of H. Hartman on "Conflict-Free Ego Functions," R. W. White on "Competence Motivation," and J. Piaget on "Intellectual Development" in the light of our findings.
Duration: 1962-1967.
Principal investigators: Burton L. White, Ph.D., Research Associate, Richard M. Held, Ph.D., Chairman, and Michael Breen, Graduate Student, Department of Psychology, Brandeis University, Waltham, Mass.; Peter H. Wolff, M.D., Consultant, Judge Baker Child Guidance Clinic, Boston, Mass.
Cooperating group: Foundations' Fund for Research in Psychiatry.

16-D-5 MOTOR LEARNING AND PERFORMANCE RELATED TO AGE AND SEX

Purpose: To determine the influence of age and sex on amount and rate of motor learning. This includes a determination of whether the exponential theory of progress of learning is applicable to motor performance. Study has taken the form of an investigation of learning of two or more large muscle motor skills. It is anticipated that data will be informative with respect to age and sex differences in standardized motor performance for a wide age range.
Subjects: 16 volunteer subjects of each sex at each age from 6 to 60 will be tested on several motor learning tasks, unselected insofar as factors which might be expected to influence motor performance are concerned.

Methods: At present, two tasks appear to be usable to fulfill the experimental requirements and others will be sought. One task is learning to balance on a horizontally pivoted platform (stabilometer). This problem has produced large amounts of learning within about 20 minutes in all age groups and in both sexes. Another task involves climbing a short unsupported vertical ladder as high as possible before it topples over. A pilot study using both apparatus with ages 6 through 60, of both sexes, indicated that the tasks could be done without difficulty and within a total time of about 45 minutes.
Publication references and plans: Findings of preliminary investigations have been reported in Research Quarterly, March and May 1961. Plan to publish findings of present study in Research Quarterly also.
Duration: Fall 1961-fall 1963.
Principal investigator: John C. Bachman, Ed.D., Assistant Professor, Chico State College, Chico, Calif.

16-D-6 PERCEPTUAL REINFORCEMENT IN COGNITIVE DEVELOPMENT OF INFANTS AND YOUNG CHILDREN

Purpose: To evaluate the role of behavior that generates information in and about the environment in the intellectual development of infants and young children.
Subjects: Normal and retarded children from early infancy to early elementary school level.
Methods: Laboratory methods of operant conditioning are adapted to provide experimental control over presentation of response opportunities and the information content of response-produced feedback while behavior as a dependent variable is recorded in quantized units.
Findings: Findings to date suggest that informational feedback sustains orderly response patterns at both infant and preschool age levels, and that response output varies as a function of informational content of feedback and reinforcement contingencies.
Publication references: American Psychologist 16:350, July 1961; 17:320, June 1962.
Duration: June 1960-continuing.
Principal investigators: Jane W. Kessler, Ph.D., Director, and Bernard Z. Friedlander, Ph.D., Postdoctoral Research Fellow, Mental Development Center, Western Reserve University, Cleveland 6, Ohio.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-D-7 COGNITIVE STUDIES IN NORMAL AND DISTURBED CHILDREN

Purpose: To study the role of intelligence in concept attainment and other cognitive functions and the role of emotional disturbance; to isolate variables involved in concept attainment.
Subjects: Children between 6 and 14 years old, normal and neurotic.
Publication references: American Journal of Psychology, 1960. Journal of Experimental Psychology, July 1961; June 1962.
Duration: 1958-not reported.
Principal investigator: Sonia F. Osler, Ph.D., Associate Professor of Medical Psychology and Pediatrics, Johns Hopkins School of Medicine, Baltimore 5, Md.
Cooperating groups: National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare; National Science Foundation.

Communication

16-E-1 ACQUISITION OF LANGUAGE

Purpose: To determine the language syntax of the child; its development, possible relation to syntax of adult language group; of mother's usages with child, etc.

Subjects: Children of graduate students and some staff; also children abroad in India, Germany, Hungary, etc.
Methods: Phonetic and nonphonetic time-sample transcriptions.
Publication plans: No publication plans formulated.
Duration: September 1962-indefinite.
Principal investigator: David Premack, Ph.D., Associate Professor, Department of Psychology, University of Missouri, Columbia, Mo.

16-E-2 CONTEXTUAL CONSTRAINTS IN THE LANGUAGE OF THE CHILD

Purpose: (1) To measure the amount of redundancy of children's written and spoken language, and of that written for and spoken to them; (2) using experimental material quantified with respect to redundancy or patterning, to determine its influence on learning, retention, comprehension, reading, and other language behavior; (3) based on the outcome of these experiments, to write one or more texts in which redundancy is well-defined. These constructed texts will be used in experiments with new groups of children to test the hypothesis that language development is fastest when optimal redundancy is built into the texts.
Methods: Samples of reading materials and spoken language will be collected that are appropriate to children in the second, fourth, and sixth grades. These samples will be quantified in terms of a measure of redundancy, and statistical comparisons will be made with similar measures obtained for adult language. Using these measures, learning materials will be constructed at five redundancy levels to investigate the influence of redundancy upon learning. A simple factorial analysis of variance design will permit a quantitative evaluation of the effect of the variables on the learning measure, including interactions and linearity.
Duration: October 1962-October 1964.
Principal investigators: Edward C. Carterette, Ph.D., Assistant Professor, Department of Psychology, and Margaret Hubbard Jones, Ph.D., Research Associate, Department of Psychology and College of Engineering, Univeristy of California, Los Angeles 24, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-E-3 SPEECH INACCURACY IN CHILDREN RELATED TO ETIOLOGY

Purpose: To explore the articulatory patterns of children diagnosed as showing articulatory inaccuracy because of varying etiological problems.
Methods: A dual-modality (visual and auditory) articulation test will be developed and standardized on five age groups (M.A.'s 5 to 10) of unselected children in urban schools who have adequate intelligence, auditory and visual acuity, and auditory discrimination. Three experimental groups falling in the same age range and diagnosed as falling into one of three etiology groups: (1) maturational; (2) retardation-intellectual; or (3) pathological-physical will be studied for intelligence, visual and auditory acuity and auditory discrimination as well as for articulatory inaccuracy. Speech profiles will be prepared for each child and compared with other children in their group and with the control group. Deviations for each child and group will be determined. By determining the differential response to the visual and auditory tests the modality of choice for each child will also be determined.
Duration: July 1961-July 1963.
Principal investigators: Joseph M. Wepman, Ph.D., Associate Professor of Surgery and Psychology, Paul Weiner, Ph.D., Lecturer in Psychology, and Anne Morency, Department of Education, University of Chicago, Chicago 37, Ill.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-E-4 A PREDICTIVE SCREENING TEST FOR CHILDREN WITH ARTICULATORY SPEECH DEFECTS

Purpose: To devise and cross-validate a predictive screening test which will distinguish those elementary school children who "outgrow" or overcome by themselves their articulatory speech defects without speech therapy from those who do not.

Subjects: Two groups of approximately 150 first grade school children with articulatory speech defects.
Methods: From a pool of test items having face validity in predicting self-mastery of articulatory errors as judged by 30 public school speech therapists or as so designated in the literature, an initial test battery will be devised. This test battery will be administered to children who will be retested after intervals of one or two years. Those items which differentiate between the children who have achieved normal speech without speech therapy and those who have not will be combined to form a new screening test. This screening test will then be administered to another group of approximately 150 new first grade children with articulatory defects to ascertain its predictive validity in differentiating those who overcome their errors without speech therapy after intervals of one and two years from those who do not.
Duration: February 1962-August 1966.
Principal investigator: C. Van Riper, Ph.D., Director, Speech and Hearing Clinic, Western Michigan University, Kalamazoo, Mich.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

Learning

16-F-1 VERBAL CONTROL OVER NONVERBAL BEHAVIOR

Purpose: General aim is to investigate the amount of control that can be obtained over a child's nonverbal behavior by operations upon his verbal behavior. Certain verbal behavior will be strengthened in children by experimental reinforcement. Resulting effects of these alterations upon their nonverbal behavior will be observed. Research will be done within a conceptual framework which considers interaction between verbal and nonverbal behavior as an interaction between two operants.
Methods: Research will adhere to a strict laboratory-experimental approach in which control can be achieved over the presentation of the stimulus events and the recording of the child's behavior. The experimental paradigm will follow intrasubject replication design.
Duration: September 1962-1965.
Principal investigator: O. Ivar Lovaas, Ph.D., Assistant Professor of Psychology, University of California, 405 Hilgard Ave., Los Angeles 24, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-F-2 RELATIVE PRESTIGE AND THE VERBAL CONDITIONING OF CHILDREN

Purpose: To study operant control of the verbal behavior of children.
Subjects: Fifth grade children in suburban Denver schools.
Methods: Operant conditioning.
Findings: Substantial control of the verbal behavior of children can be obtained under precise laboratory conditions.
Publication plans: Will submit to Journal of Experimental Analysis of Behavior.
Duration: March 1962-July 1963.
Principal investigator: Albert I. Prince, Ph.D., Assistant Professor of Psychology, University of Denver, Denver, Colo.

16-F-3 LEARNING AND RETENTION AS A FUNCTION OF TRIGRAM FREQUENCY, SEX, AND GRADE LEVEL

Purpose: To determine whether the sequential dependencies of language can be observed in children and, if these conditional probabilities are found, to investigate effects of high and low frequency sequences (trigrams) on learning and recall in children of various ages.

Subjects: Approximately 120 children of the University Elementary School from grades 1A, 2B, 3A, 4A, 5A, and 6A to gather normative data on trigrams; 61 children from grades 2, 4 and 6 in the learning and recall experiment.
Methods: Normative data were gathered by having children respond with a third letter after having read a digram. After frequencies of the various trigrams were collated, lists for the learning experiment were constructed. Three high and three low frequency words composed a list. The list was presented serially for learning to a criterion, and the order of the list was counterbalanced over subjects. Children were asked to recall the lists 24 hours later.
Findings: Results indicate that children not only give reliable sequences of letters, but that these sequences are consistent with sequences given by adults. Data show that as children progress through grade school they make fewer errors in learning, girls on the whole make fewer errors than boys, and high frequency trigrams are learned with fewer errors than low frequency trigrams. There were no differences found between types of trigrams in recall.
Publication plans: Journal of Verbal Learning and Verbal Behavior.
Duration: January 1962-June 1962.
Principal investigator: Dolores D. Kluppel, Ph.D., Assistant Professor of Psychology, University of California at Los Angeles, Los Angeles 24, Calif. (Reported by Wendell E. Jeffrey, Ph.D., Associate Professor of Psychology.)

16-F-4 CROSS-MODALITY STUDIES OF TRANSPOSITION IN CHILDREN

Purpose: Comparison of inter- and intramodal differences in learning and transposition in vision and audition with special attention to developmental questions.
Subjects: First, second, and fifth grade children; college students.
Methods: Experimental--discriminations are taught under various conditions; subjects are then tested for transposition in hue, brightness, pitch and loudness.
Publication references: Child Development; Journal of Comparative and Physiological Psychology.
Duration: 1959-1965.
Principal investigators: John P. McKee, Ph.D., and Donald A. Riley, Ph.D., Associate Professors of Psychology, University of California, Berkeley 4, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-F-5 INFLUENCE OF SPATIAL SEPARATION OF STIMULUS, RESPONSE AND REWARD ON DISCRIMINATION LEARNING IN YOUNG CHILDREN

Purpose: To evaluate the relative contribution of spatial separation of stimulus response and reinforcement in various combinations, on rate of discrimination learning.
Subjects: 60 nursery school children, 3 and 4 years of age.
Methods: Five groups at each age level were given a black-white discrimination task in a modified Wisconsin General Test Apparatus. Stimuli were presented so that (1) stimulus response and reinforcement were all together, or (2) reinforcement was presented eight inches away from the stimulus and response, or (3) response was eight inches away from the stimulus and reinforcement, or (4) stimulus was eight inches away from response and reinforcement, or (5) stimulus response and reinforcement were each separated by eight inches.
Findings: Only subjects in groups one and two learned the task indicating the importance of the response being spatially contiguous with the stimulus for easy learning in young children. There was also a significant age difference.
Publication plans: To be published in Journal of Comparative and Physiological Psychology or Journal of Experimental Psychology.
Duration: August 1962-December 1962.
Principal investigator: Wendell E. Jeffrey, Ph.D., Associate Professor of Psychology, University of California, Los Angeles 24, Calif.
Cooperating group: National Science Foundation.

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16-F-6 DEVELOPMENT OF INCENTIVE VALUES IN CHILDHOOD

Purpose: (1) To compare values of material and verbal incentives in discrimination learning; (2) to evaluate paired comparisons as an incentive preference scale; and (3) to analyze age trends in incentive values between ages 6 and 10.

Subjects: 120 elementary school children--20 boys and 20 girls at each of grades one, three, and five.

Methods: Subjects will evaluate five incentive types by paired comparisons and via a five-choice Wisconsin General Test Apparatus discrimination problem. Incentives are bubble gum (edible), penny (token), charm (manipulatable), "better than before" (verbalism), and control. Reinforcements are presented simultaneously. Scores are incentive choices, not discrimination learning curves.

Duration: July 1962-August 1964.

Principal investigator: Sam L. Witryol, Ph.D., Professor of Psychology, University of Connecticut, Storrs, Conn.

Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-F-7 STIMULUS AMBIGUITY AND LEARNING SET AS A VARIABLE IN NONREVERSAL SHIFTS IN CHILDREN

Purpose: The Kendlers have reported a surprising amount of nonreversal shift-responding on the part of children as old as 10 years in a situation which permits an inference regarding the child's basis of responding on a test task as the result of two previous training situations.

Subjects: Children, aged 4, 5, 9, and 10 years.

Methods: Children first learn a black-white or large-small discrimination with stimuli varying on the two dimensions. In phase II, subjects are presented with one pair varying in both size and brightness and are now reinforced for approaching that stimulus which was negative in phase I. For subjects trained on black in phase I, they are reinforced for white as well as large or small in phase II. When the other pair of stimuli is introduced, subjects' selection indicates whether he is choosing according to size or color and thus whether he is making a reversal or nonreversal shift.

Findings: Although learning set training does not appear to alter the Kendlers' findings, preliminary data strongly suggest that when the form of the stimuli is changed from phase I to phase II, the number of nonreversal shifts is markedly reduced. The implications are that in the regular situation, subjects are responding to the test stimuli as they did in phase I rather than as a result of phase II training. Changing forms from phase I to phase II appears to break up this tendency.

Publication plans: Probably Journal of Experimental Psychology.

Duration: March 1962-January 1963.

Principal investigator: Wendell E. Jeffrey, Ph.D., Associate Professor of Psychology, University of California, Los Angeles 24, Calif.

Cooperating group: National Science Foundation.

16-F-8 SIMULTANEOUS AND SUCCESSIVE DISCRIMINATION LEARNING AS A FUNCTION OF ANXIETY AND SOCIAL REINFORCEMENT

Purpose: To study the effect of anxiety and social versus nonsocial reinforcement on the course of learning at two levels of difficulty in discrimination learning.

Subjects: High- and low-anxious fourth grade children.

Methods: High- and low-anxious subjects (as measured by the Children's Manifest Anxiety Scale) were given either a simultaneous or successive visual discrimination learning motor task and were reinforced for correct responses by either a buzzer or experimenter approval. All subjects received 54 trials.

Findings: Overall: Successive discrimination easier; social reinforcement produced higher level of learning. High-anxious subjects did better under social reinforcement than under buzzer reinforcement but no such difference was found for low-anxious subjects. Social reinforcement was found to facilitate the learning of the simultaneous discrimination problem but hinder the learning of the successive problem.

Publication plans: Publication is planned; study is in process of being written up for report. Future plans call for replication of the study developmentally from preschool through seventh grade.
Duration: Spring-summer 1962.
Principal investigator: Frances Degen Horowitz, Ph.D., Public Health Service Fellow and Research Associate, Bureau of Child Research, University of Kansas, Lawrence, Kans.

16-F-9 THE EFFECT OF ADAPTATION ON INSTRUMENTAL ESCAPE CONDITIONING OF ANXIOUS AND NONANXIOUS CHILDREN

Purpose: To determine the relation between anxiety and adaptation in an instrumental escape conditioning situation.
Subjects: 36 second and third grade children.
Methods: Sarason's anxiety scales were used to divide subjects into an anxious group and a nonanxious group. Half of the anxious group received adaptation to a 98-decibel tone (i.e., 20 presentations of tone) and the other half did not receive adaptation trials. Similarly, half of the nonanxious children received adaptation and half did not. All subjects received instrumental escape training. The subjects were required to pull a lever through a 12-inch excursion in order to turn off a 98-decibel tone.
Publication plans: Study will be submitted to Journal of Experimental Psychology or Journal of Comparative and Physiological Psychology.
Duration: January 1962-April 1962.
Principal investigator: R. K. Penney, Ph.D., Assistant Professor of Psychology, University of Texas, Austin 12, Tex.
Cooperating group: Hogg Foundation for Mental Health.

16-F-10 DELAY OF REINFORCEMENT AND RETENTION

Purpose: Primary object is to determine the effects of reinforcement delay during learning process and, particularly, on the retention of the learned material. The learning task consists of cognitive material, and is presented in the form of a series of discriminations. Further goals are to study the ways in which these reinforcement delay effects interact with other classes of factors, including characteristics of the material to be learned, formal learning and retention variables, and characteristics of the learner.
Subjects: Third grade children.
Principal investigator: Yvonne Brackbill, Ph.D., Department of Psychiatry, University of Colorado Medical School, 4200 E. Ninth Ave., Denver 20, Colo.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-F-11 FACTORS OF SPECIFIC SET (ATTENSITY) IN LEARNING OF GIFTED SECONDARY STUDENTS

Purpose: To find out whether very specific attitudes (sets) represent an "important" learning mechanism used by gifted secondary students.
Subjects: Within one school, gifted eleventh grade students will be divided randomly into an experimental group and a control group.
Methods: Both groups will be pretested. Experimental group will subsequently be taught States-of-origin of some U. S. Senators, but approximately three-fourths of Senators will not be used for training. A final test on all Senators will show whether being trained on only part of the material was influential in increasing learning of the untrained material, and also the final test will show whether material used in training the experimental group is communicated to the control group. In addition, on the final test students will be asked party affiliations of Senators, and these scores may reveal that the specific set (to learn States-of-origin of Senators) has generalized.

Duration: March-October 1961.
Principal investigator: Doris R. Entwisle, Ph.D., Social Science Research Council Post-doctoral Fellow, Department of Education, Johns Hopkins University, Baltimore 18, Md.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-F-12 THE LEARNING PROCESS IN A PSYCHOSOMATIC DISORDER

Purpose: To investigate the relationship between respiratory patterns of asthmatic children and a number of specific environmental events.
Subjects: Two groups of children, ages ranging from 4 to 12 years--30 with severe bronchial asthma; 30 chronically ill--matched individually on basis of age and sex.
Methods: Respiratory patterns of two groups of children will be recorded during two 10-minute experimental sessions. In each session, experimenter will manipulate the stimulus conditions in order that changes evoked in respiratory patterns can be related to environmental events (recordings of unfamiliar voices and mother's and father's voice).
Duration: September 1962-August 1962.
Principal investigators: Freya W. Owen, Ph.D., Research Associate, Laboratory of Human Development, Stanford University, Stanford, and Gordon F. Williams, M.D., Medical Director, Stanford Convalescent Home, Palo Alto, Calif.
Cooperating group: California Tuberculosis and Health Association.

Intelligence, thought, and problem solving

16-G-1 EPISTEMIC CURIOSITY AND CREATIVE THINKING: I. CURIOSITY MOTIVATION, GRADE MOTIVATION, AND GENERALITY OF LEARNING

Purpose: To compare the effects of epistemic (intellectual) curiosity and of "test-grade" motivation on two aspects of learning--rote memory and comprehension. Specifically, it was predicted that curiosity-motivated subjects would perform relatively better on comprehension than rote, and test-motivated subjects the reverse.
Subjects: Tenth grade students.
Methods: Motivation was indexed both by differential instructions and by individual difference measures of personal involvement in the learning material (in the case of curiosity) and of academic achievement (for test motivation).
Findings: (1) Overall comparison of curiosity instructions with test instructions (I.Q. and test anxiety controlled) yielded a near significant ($p < .075$) tendency in the predicted direction, the standard score differential between comprehension and rote ($Z_C - Z_R$) being higher for "curiosity" than "test" groups. (2) On eliminating "uninvolved" subjects (presumed to have been underexposed during learning from the curiosity condition, the above tendency became significant ($p < .05$). (3) A breakdown of curiosity and test groups into academic achievement by test-anxiety subgroups revealed that the obtained significant difference is confined to the high-anxiety overachievers and the low-anxiety underachievers. These two subgroups in the test condition performed significantly more poorly than their counterparts in the curiosity condition and than low-anxiety overachievers in the test condition.
Duration: Not reported-1962.
Principal investigator: Albert J. Caron, Ph.D., Section on Personality, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

16-G-2 METAPHOR AND PRIMARY PROCESS

Purpose: To study relationship between primary process thinking and ability to understand figures of speech.
Subjects: Schizophrenic and normal children.
Methods: Paper and pencil tests.
Duration: Fall 1962-fall 1964.
Principal investigator: Alvin G. Burstein, Ph.D., Assistant Professor of Psychology, University of Michigan, Ann Arbor, Mich.

16-G-3 CORNELL CRITICAL THINKING READINESS PROJECT

Purpose: Primary purpose is to determine at what level and to what degree students can be taught various aspects of critical thinking. Secondary purposes are the preparation of measuring instruments and the testing of certain assumptions about critical thinking and its instruction.
Methods: For each aspect of critical thinking the plan is to develop instruments, pretest students on several variables, teach them intensively for about two weeks, and give them post-tests. Multiple regression equations, which attempt to predict level of achievement after instruction, will be developed. The equations will be cross-validated and simplified. Control groups will be used to see if results are significant. Concurrently, the concept, "critical thinking," will undergo continuous refinement.
Duration: July 1962-August 1964.
Principal investigator: Robert H. Ennis, Ph.D., Associate Professor of Secondary Education, Cornell University, Ithaca, N. Y.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-G-4 LEARNING AND GENERALIZATION OF LOGICAL OPERATIONS

Purpose: Aims of project are: (1) To determine the ability of children of at least two age levels (i.e., five and eight years) to achieve the logical operations and structures basic to the conceptualization of number and the measurement and manipulation of space. The test of the child's ability to solve a variety of logical number and space problems will permit a determination of the unitary character of logical thinking in children. (2) To determine the effect of learning upon differently achieved levels of logical thinking. The provision for two types of learning ("didactic" and "inductive") will permit the assessment of the superiority of number and measurement learning with each method. (3) To determine the spread of generalization to related and unrelated logical problem-solving as a consequence of learning by didactic and inductive methods.
Duration: February 1962-January 1964.
Principal investigator: Harry Beilin, Ph.D., Assistant Professor, Department of Education, Brooklyn College, City University of New York, Brooklyn 10, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-G-5 ON THE CONSERVATION OF SUBSTANCE, WEIGHT, AND VOLUME

Purpose: To determine the degree to which the conservation schemata generalize across situations.
Subjects: 20 students each from first, second, third, fourth, fifth, and sixth grades.
Methods: Each subject is presented with five different sets of materials (two plasticine balls; glasses of water; sets of metal cubes; plastic string; wire) and asked the standard questions required to show the operation of conservation.

Findings: (1) Substance, weight, and volume do comprise a scale for each sort of material just as Piaget has reported. (2) Conservation does not generalize perfectly across the sorts of materials used in the testing. The variance is greatest in the third and fourth grades. It disappears in the first grade when very few children show conservation, and it disappears in the sixth grade when, for substance and weight, nearly all show conservation.
Publication plans: Perhaps in Journal of Genetic Psychology.
Duration: January 1962-October 1962.
Principal investigator: Ina C. Uzgiris, Ph.D. Candidate, University of Illinois, Urbana, Ill. (Under direction of J. McVicker Hunt, Professor of Psychology, University of Illinois.)

16-G-6 AN ASSESSMENT OF CONCEPT FORMATION IN YOUNG CHILDREN

Purpose: (1) To develop techniques for assessing concept development in nursery school age children; (2) to study the role of concepts in transfer both within and across modalities with particular reference to the role of verbalization on performance; and (3) to study the role of learning sets in problem-solving in young children.
Subjects: Nursery school children in the age range of three to five years.
Methods: Individual testing sessions involving a variety of two-choice problems in discrimination.
Duration: October 1962-December 1963.
Principal investigators: Marion Blank, Ph.D., Instructor, and Wagner H. Bridger, M.D., Assistant Professor, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, 1300 Morris Park Ave., New York 61, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Social behavior

16-H-1 THE DEVELOPMENT OF SOCIAL PERCEPTION DURING INFANCY

Purpose: To investigate some of the crucial perceptual discriminations made by infants with regard to their social environment, e.g., when and how they come to discriminate humans from nonhumans, mother from other people, mothers' states of attentiveness and inattentiveness.
Subjects: Normal infants from birth to about one year of age.
Methods: Experimental and systematic observation techniques of stimulus presentation and behavior recording. Visual stimuli will be employed almost exclusively, presented via photographic techniques. Behavior will be recorded primarily by trained observers with some mechanical recording.
Publication plans: Suitable journal articles will be prepared.
Duration: September 1962-September 1965.
Principal investigator: Gerald Stechler, Ph.D., Research Associate, Child Development Unit, Boston University School of Medicine, 80 E. Concord St., Boston, Mass.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-H-2 PERSON-PERCEPTION IN YOUNG SCHOOL CHILDREN

Purpose: An investigation of the dimensions of behavior used by children in their descriptions of other people; relationships of these dimensions to previous experience; and predictive usefulness of the delineation of these dimensions in terms of specific behaviors.

Subjects: Subjects drawn largely from two populations: (1) A group of elementary school children, grades one, three, five, and seven; (2) a group of University of Minnesota undergraduates.
Methods: Method of approach will vary considerably. The initial phase calls for the use of factor analytic techniques and the development of a weighting system for the generation of factor scores.
Publication plans: Results will be made available through appropriate psychological journals (Journal of Abnormal and Social Psychology, Child Development, and the Journal of Social Psychology).
Duration: October 1962-indefinite.
Principal investigator: James W. Barnard, Ph.D., Assistant Professor, Institute of Child Development, University of Minnesota, Minneapolis 14, Minn.

16-II-3 INTERPERSONAL RELATIONS PROJECT FOR STUDYING THE TWO-PERSON RELATIONSHIP

Purpose: (1) To establish two-person relationships between emotionally troubled elementary school boys and male university students that may facilitate personal growth in both participants; (2) to study changes in behavior, attitudes, and self-perception of both participants as a function of their relationship; (3) to study interaction of "similarity," "self-disclosure," and "understanding" phenomena in two-person relationships; (4) to refine methods for observing two-person interaction through use of a multimethod-multitrait matrix; (5) to develop standardized method for training college men to establish helpful relationships with emotionally troubled boys--and studying effects of that training; and (6) to prepare a model for use in other communities.
Subjects: 40 fifth and sixth grade troubled boys in relationships with 40 male college students (20 receiving training and 20 untrained). Controls: 20 boys and 20 students (as above) without such relationships.
Methods: Derived measures drawn from discrepancies in various self and "other" descriptions on semantic differential type instruments. Analysis of child-student interaction from tape recordings of conversations. Henmon-Nelson; Stanford Achievement; IPAT Children's Personality Questionnaire; and others.
Publication plans: Appropriate professional journals.
Duration: August 1962-August 1965.
Principal investigator: Gerald Goodman, Ph.D., Director, Interpersonal Relations Project, University Y.M.C.A., University of California, Berkeley 4, Calif.
Cooperating groups: Berkeley Public Schools; Institute of Human Development, University of California; Berkeley Health Department; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-II-4 COALITIONS AND STRATEGY IN SMALL GROUPS--CHANGES IN STRATEGY AS A FUNCTION OF AGE

Purpose: To study the characteristics of strategy in a simple competitive game in triads composed of children and adolescents.
Subjects: Samples of school age and high school children in approximately the following age ranges: 8-10, 12-14, 16-18; homogeneous with respect to sex.
Methods: Groups of three subjects compete in a competitive game for a prize, with observation of bargaining procedure and types of coalition. Groups vary in the pattern of internal power distribution.
Publication plans: Article will be submitted to Child Development in March 1963.
Duration: June 1962-February 1963.
Principal investigator: W. Edgar Vinacke, Ph.D., Professor of Psychology, University of Hawaii, Honolulu, Hawaii.
Cooperating group: Office of Naval Research, U. S. Department of Defense.

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16-H-5 SOCIAL NEEDS AND GANG MEMBERSHIP

Purpose: To ascertain the motive behind joining and belonging to gangs.
Subjects: Some 500 10 year old boys.
Methods: Questionnaire plus interview.
Publication plans: As soon as project is completed, results will be summarized in an article and presented to a psychological journal.
Duration: September 1961-September 1963.
Principal investigator: Sister Mary Amatora, OSF, Ph.D., Chairman, Department of Psychology, St. Francis College, Ft. Wayne 8, Ind.
Cooperating groups: Department of Psychology, St. Francis College; public and parochial schools in and around Fort Wayne.

16-H-6 A COMPARISON OF PEER AND ADULT AUTHORITY IN THE CONTROL OF IMPULSIVITY AMONG BOYS

Purpose: To study the relationship of individual and group conceptions of behavior--specifically psychoanalytic and social psychological--as seen in the control of aggressive impulse expression. Broader purpose is to develop theory of group effects on individual personality.
Subjects: 196 latency-age boys attending a suburban school--all white, American, middle class, in fourth, fifth, or sixth grades.
Methods: One-meeting laboratory experiments with eight aggregates each consisting of eight boys each, with exposure to variations in decision-making as to a task of drawing figure 8's. Variables manipulated include high or low impulse control, high or low arousal of impulse, and exposure to adult- or peer-imposed decision about task. Measurement as to variations in resultant cohesiveness, dependence on adult, and adherence to task based on observer's ratings and responses of boys to individual interview forms.
Findings: Major finding was that in a one-meeting formed group, the boys come prepared to avow great positive feelings for peers, deny the admission of impulsive feelings, and are tremendously dependent on adult acceptance. Fifty-nine of the 64 boys rated dependence on the adult as the single most important factor in the meeting. When impulsivity continues to be aroused and no channels such as discussion are provided to help retain mastery over these feelings, meeting disintegrates into acting-out of said feelings, while a segment of the boys plead for control from adult.
Publication references and plans: Publication planned; dissertation available on inter-library loan from Western Reserve University Library.
Duration: January 1961-December 1962.
Principal investigator: John Matsushima (D.S.W. Candidate, Western Reserve University), Chief Group Worker, Children's Aid Society, 10427 Detroit Ave., Cleveland 2, Ohio.

PERSONALITY AND ADJUSTMENT

General

16-I-1 EXPERIMENTAL STUDY OF THE INFANT'S REACTION TO A CHANGE OF PHYSICAL ENVIRONMENT

Purpose: To see if there will be a period of "grief" or "mourning" following a change of physical environment.
Subjects: 60 infants of both sexes whose chronological ages range from 1 month to 12 months.
Methods: Children are transferred from an institution where there is no mother figure to a foster home. They are tested (Griffiths Developmental Scale, Piaget's object-concept stages, etc.) three days before departure from the institution, three days after arrival in the foster home, and between the second and third month after placement.
Publication plans: Dissertation; articles.
Duration: May 1962-May 1964.
Principal investigators: Therese Gouin Decarie, Ph.D., Associate Professor, and Yolande Tanguay, Ph.D. Candidate, Institute of Psychology, University of Montreal, Montreal, Que.

16-I-2 DEVELOPMENT OF SENSITIVITY OF AESTHETIC VALUES

Purpose: Initial objective is to determine how the proportion of children demonstrating various degrees of aesthetic sensitivity in response to visual art varies with age or school grade. A further objective will be to elucidate factors associated with its early appearance in some children.
Methods: Paired slides for projection will show two works of art which are of somewhat similar character but which, a group of expert judges agree, differ greatly in aesthetic quality. School children will be presented with these pairs and asked to judge which picture in each pair is the better work of art or to express a preference for one picture in the pair. Scores obtained by comparing their responses with those of experts will be considered as a function of age or school grade, both overall and for various types of pairs. Children who show unusually early agreement with the judgments of experts will be studied more intensively, along with a matched group not showing this characteristic.
Duration: September 1962-August 1964.
Principal investigator: Irvin L. Child, Ph.D., Professor of Psychology, Yale University, 333 Cedar Street, New Haven, Conn.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

Assessment of personality

16-J-1 DEVELOPMENT OF A METHOD FOR THE OBJECTIVE DESCRIPTION OF SOCIAL AND EMOTIONAL BEHAVIOR OF CHILDREN

Purpose: To develop method of collecting specific, objective, and observable behaviors of children in school. Preliminary analyses of data from a pilot study indicate that reliable, meaningful descriptions that will be useful for personality research and perhaps for mental health screening are obtained from the method.
Duration: 1960-1963.
Principal investigator: Earl S. Schaefer, Ph.D., Scientist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

16-J-2 THE DEVELOPMENT AND VALIDATION OF AN IMPULSE CONTROL SCALE

Purpose: To develop and validate a projective instrument with objective scoring to be used in determining the likelihood of delinquents, alcoholics, suicides, etc., acting out. This scale attempts to measure a person's level of impulsive behavior relative to his degree of control.
Findings: One pilot study completed; two others underway. Results thus far have been quite encouraging, including discriminating between serious offenders (repeaters) and mild offenders (one or two brushes with the law).
Duration: 1958-completed.
Principal investigators: Charles F. Elton, Registrar, James E. Seegars, Jr., University Counseling Service, and Frank Chriswell, Department of Psychology, University of Kentucky; Leonard Lipton, Ph.D., Psychologist, and William Sutton, Veterans Administration Hospital; Lexington, Ky. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Lexington Veterans Administration Hospital; Kentucky Reception Center (for delinquents).

16-J-3 ASSESSMENT OF NORMALITY AND PATHOLOGY IN CHILDHOOD

Purpose: To establish a new classification of childhood disturbances.
Methods: Analytic investigation of individual children and theoretical evaluation of clinical material.
Duration: October 1962-1965.
Principal investigators: Anna Freud, LL.D., Director, and Liselotte Frankl, B.S., Ph.D., Psychiatrist in Charge, Hampstead Child-Therapy Course and Clinic, 12 & 21 Maresfield Gardens, London N.W.3, England.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Basic processes

16-K-1 BEHAVIOR PATTERNS OF NORMAL CHILDREN: A CROSS-SECTIONAL AND LONGITUDINAL STUDY OF CHILDREN IN NURSERY AND ELEMENTARY SCHOOL

Purpose: To investigate personality patterns of children from age 3-5 years to 10 years, and to assess the consistency of their behavior through nursery and elementary schools.
Subjects: 138 boys and girls of above average intelligence who attended the nursery school at the Institute of Human Development, University of California, Berkeley, and then entered elementary schools in the San Francisco Bay area.
Methods: Children were rated each semester on 61 rating scales by several teachers; scales were factor-analyzed.
Findings: Preliminary results indicate six important personality factors at the nursery school level--sociability, socialization, emotional reactivity, anxiety, verbal behavior, and achievement.
Publication plans: Research monograph or articles in psychological journals.
Duration: June 1958-1964.
Principal investigators: Samuel R. Pinneau, Ph.D., Coordinator of Child Study Center, San Fernando Valley State College, Northridge, and Ronald C. Dillehay, Ph.D., Lecturer in Public Health, University of California, Berkeley 4, Calif., and Julius M. Sassenrath, Ph.D., Associate Professor of Education, Indiana University, Bloomington, Ind.

16-K-2 DEVELOPMENTAL ASPECTS OF PERCEPTION OF THE BODY IMAGE

Purpose: The integration of percepts and ideas about the characteristics of one's body is a fundamental developmental task. To date, little is known regarding the processes and stages whereby such integration normally develops. Proposed study will explore some aspects of this problem by testing individuals' judgments of the proportions, size, and extension of their own body.
Subjects: About 400 normal males and females ranging in age from early childhood to senescence. At least 30 subjects per age level represented will be sampled.
Methods: Data with respect to the following dimensions will be obtained: (1) intelligence; (2) general spatial acuity; (3) self-drawings; (4) self-recognition (pictures of the subjects' bodies will be interspersed among a series of others); (5) estimates of entire body size, of the size of body parts, and of the "reach" of arms and legs; (6) estimates of the proportion of head, truck, arms and legs, respectively, in relation to the remainder of the body; and (7) estimates of the relative maturity (or age) of the subject's own body. Photographs, sketches of body outlines, projected images, and experimental tasks involving judgments of the extension of the body in space will be used to measure the dimensions to be investigated.
Duration: May 1962-1965.
Principal investigator: Elizabeth Gellert, Ed.D., Association for the Aid of Crippled Children, 345 E. 46th St., New York, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-K-3 DEVELOPMENT OF SOCIAL CLASS AWARENESS, SELF-IDENTIFICATION, PREFERENCE, AND PERCEPTION OF ADULT PREFERENCES IN LOWER CLASS CHILDREN

Subjects: 480 lower class children of matched environmental, racial, and sex groupings with ages equally distributed from 3 to 12 years; 120 upper and 120 middle class children as control groups.
Methods: Interviews using dolls or puppets dressed in the lower class and in the middle and upper class manner.
Publication plans: Dissertation Abstracts; New York University Doctoral Dissertation Files.
Duration: February 1962-June 1962.
Principal investigator: Mary M. Allen (Ph.D. Candidate, New York University), Teacher, Public School 165, New York, N. Y.

16-K-4 RELATIONSHIP BETWEEN SELF-CONCEPTS OF NEGRO ELEMENTARY SCHOOL CHILDREN AND THEIR ACADEMIC ACHIEVEMENT, INTELLIGENCE, INTERESTS, AND MANIFEST ANXIETY

Purpose: To determine and compare the self-concepts of fourth and sixth grade children, and to determine whether these self-concepts are related to their academic achievement, intelligence, interests, and manifest anxiety.
Subjects: Approximately 300 children drawn from the fourth and sixth grades of three randomly selected Negro elementary schools of East Baton Rouge Parish and the Southern University Laboratory School (Laboratory School included since its clientele differ in socio-economic status from other schools in the parish).
Methods: Stanford Achievement Test results; Thorpe "What I Like to Do" Interest Inventory scores; Primary Mental Abilities Test results; Michigan Picture Test performances; Manifest Anxiety scores (Castenada, et al.); and cumulative records. Comparisons will be made by sex, grade, and socio-economic status. Data from a similar study by Bledsoe and Garrison will be used for purposes of racial comparisons. Appropriate descriptive and inferential statistical procedures will be employed in the analysis.
Duration: May 1962-April 1964.
Principal investigators: Comradge L. Henton, M.A., Assistant Professor and Edward E. Johnson, Ph.D., Professor, Department of Psychology; Augustus Blanks, Ph.D., Professor of Special Education; and Dr. Joseph McKelpin, Professor of Education and Principal of the Laboratory School, Southern University and Agricultural and Mechanical College, Baton Rouge, La.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-K-5 DEVELOPMENT OF SEX-ROLE CONCEPTS AND ATTITUDES

Purpose: (1) Clarification of causal sequences in three empirically associated components of sex-role identification. (Does preferential imitation of the same-sex parent precede or follow preferential attachment to him? Does stable sex-type identity precede or follow imitation of the same-sex parent?) (2) Assessment of Piaget stages or cognitive tasks as defining sequences in individual development. (3) Study of relations between cognitive development on matched social and nonsocial concepts. General aim of study is to clarify relations between cognitive and social development.
Subjects: Matched bright and average children, aged four to eight.
Methods: Follow-up testing; projective and behavioral measures of sex-role attitudes; Piaget tasks paralleled by cognitive tasks involving sex-role concepts, e.g., physical constancy and constancy of sex-identity.
Duration: Not reported-1963.
Principal investigator: Lawrence Kohlberg, Ph.D., Assistant Professor of Psychology and Human Development, University of Chicago, Chicago 37, Ill.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-K-6 CINEMANALYSIS OF EMOTIONAL RESPONSES OF INFANTS

Purpose: (1) To investigate the relationship between strength and duration of emotional disequilibrium after a stress situation and variables of sex, adoptive and nonadoptive infants, and direction of responses; and (2) to further develop techniques for analyzing human behavior through cinematography.
Methods: Memo-motion pictures of 100 one year old infants and their mothers during a standardized dressing situation and immediately following a stress experience will be observed and categorized through the use of a special modified memo-motion analysis projector with synchronized recorder and IBM key punch. As the judges are viewing the film, response categories will be recorded on to IBM cards with statistical analysis to determine judges' reliability, relationship between strength and duration of emotional disequilibrium and sex, adoption and nonadoption status.
Duration: 1962-1964.
Principal investigators: Damaris Pease, Ph.D., Associate Professor of Child Development, Louis A. Facto, M.S., Assistant Professor and Photographer, Iowa Agricultural and Home Economics Experiment Station, and Leroy Wolins, Ph.D., Associate Professor of Psychology and Statistics, Iowa State University of Science and Technology, Ames, Iowa.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-K-7 THE RELATIONSHIP OF GALVANIC SKIN RESPONSE TO DREAMS AND SLEEP

Purpose: To gather more physiological data on normal and aberrant sleep (e.g., enuresis).
Subjects: Children, ages 5-10.
Methods: Children sleep all night while their dreams (rapid eye movements) and GSR are recorded. For bedwetters, an electrical device signals the moment of wetting.
Publication plans: Data will be submitted to psychiatric journals.
Duration: August 1962-indefinite.
Principal investigator: Chester M. Pierce, M.D., Assistant Professor of Psychiatry, University of Oklahoma Medical Center, Oklahoma City 4, Okla.
Cooperating group: Veterans Administration.

16-K-8 PERSONALITY CHARACTERISTICS RELATED TO SUSCEPTIBILITY TO HYPNOSIS IN CHILDHOOD

Purpose: To establish developmental influences upon personality, with hypnotic susceptibility as one indicator.
Subjects: Kindergarten and school age children, through high school.
Methods: Hypnotic induction, individual and parental interviews, verbal and experimental tests of individual differences.
Findings: Children, ages 6-12, are not only more susceptible to hypnosis than college students, but show particularly high areas of susceptibility, especially visual hallucinations and amnesia.
Publication plans: Article by Rosemarie K. Moore, and Lillian W. Laver, based on earlier work, submitted for publication.
Duration: 1961-1964.
Principal investigators: Ernest R. Hilgard, Ph.D., Professor of Psychology, and P. M. Bentler, Ph.D. Candidate, Laboratory of Human Development, Stanford University, Stanford, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-K-9 WISH-FULFILLMENT, PESSIMISM AND COMPROMISE--THEIR ROLE IN NORMAL DEVELOPMENT AND PSYCHOPATHOLOGY

Purpose: To study the responses of normal children and of emotionally disturbed children to situations which are frustrating or emotionally arousing.
Subjects: Normal children, ages 5-16 (for developmental study), and control group. Various types of emotionally disturbed children.
Methods: A series of tests of story completion and picture-story completion type specifically designed for study. Developmental trends and normative data on the tests have been obtained.
Publication plans: A chapter has been submitted for a book which will deal with adjustment problems in the classroom.
Duration: 1959-1962.
Principal investigator: Virginia I. Douglas, Ph.D., Assistant Professor of Psychology, McGill University, and Senior Psychologist, Montreal Children's Hospital, Montreal, Que.
Cooperating group: Department of National Health and Welfare of Canada.

16-K-10 THE MORAL JUDGMENT OF THE ADOLESCENT

Purpose: Studies concerning the development of moral judgment have been under way in the Psychology Department since 1960. First results indicated continous development in the increasing use of intentionality (i.e., the taking account of intentions or motives as a criteria in the evaluation of misdeeds or crimes) through late adolescence. In addition to developing more refined tools for a more incisive analysis of the use of intentionality, it is hoped to relate the developing use of intentionality to the use of animism.
Subjects: It is hoped to increase sample of subjects to permit a more thorough analysis of the relevant variables involved in this important aspect of socialization. Samples of adolescents from differing ethnic groups, as well as adolescents raised in Kibbutz (communal) settlements would be included.
Principal investigator: Sol Kugelmass, Ph.D., Department of Psychology, The Hebrew University, Jerusalem, Israel.

16-K-11 TOLERANCE FOR PAIN AND SUFFERING

Purpose: To further explore: (1) relationship found between perceptual characteristics and some measurable aspects of personality on the one hand, and tolerance for the stress of pain and the intolerance for the stress of confinement and isolation on the other hand, and the

implications of this relationship; (2) changes in these perceptual characteristics that can be environmentally induced; and (3) atypical perceptual characteristics that have been found in some juvenile delinquents and in some patients with clinical indications of brain pathology.
Subjects: Boys and girls held at Massachusetts Youth Service Board Detention Centers; Negro boys attending a settlement house in Boston; high school students in the city of Cambridge; children of workers attached to the Marine Biological Laboratories and Oceanographic Institute, Woods Hole; and music students attending classes in Concord.
Findings: A sizeable proportion of juvenile delinquents show an atypical pattern of behavior in respect to tactual measures so far developed. Thus far, this atypical pattern--"stimulus governed"--has also been found in patients with clinical indications of brain pathology. A large number of the "delinquents" are extreme Reducers, belonging to the type identified as in constant need of changing sensory input. Three kinds of persons, differing in their vulnerability to pain and stress and in their method of processing the sensory environment have been experimentally identified: (1) the Reducer tends subjectively to decrease perceived size. He is tolerant of suffering from pain, but is intolerant of the stress of monotony and incarceration; (2) the Augmenter tends subjectively to increase perceived size. He is intolerant of suffering from pain, but is tolerant of the stress of monotony and incarceration; and (3) the Moderate alters perceived size very little. He is moderately tolerant of suffering from pain and of the stress of monotony and incarceration.
Publication references: Acta Psychologica 19:755-756, 1961; Journal of Nervous and Mental Diseases 134:5:415-421, May 1962.
Duration: 1958-indefinite.
Principal investigator: Asenath Petrie, Ph.D., Research Associate, Department of Psychiatry, Harvard Medical School, Department of Surgery, Beth Israel Hospital, and Boston Sanatorium, Boston, Mass.

Emotional and personality disturbances

16-L-1 DIAGNOSTIC CLASSIFICATION OF PROBLEM CHILDREN

Purpose: To determine classification categories for problem children on the basis of behavior symptoms as reported to community guidance centers by their parents and professional workers.
Subjects: 500 children, aged 5 to 15 years, referred to community child guidance centers for diagnosis and treatment.
Methods: Questionnaires, spontaneous reports by mothers, reports by social workers, reports by clinical psychologist, reports by psychiatrists. Analysis of data by objective methods includes percentage analysis, intercorrelation of all behavior symptoms together with items related to physical and social characteristics, factorial analysis, identification of factors which have been previously isolated.
Findings: Preliminary findings seem to support hypothesis that some factors such as aggression, anxiety, school behavior, enuresis, jealousy, running away, sex behavior, broken marriage, working mothers, etc, tend to cluster in various patterns which in the later study may be identified as behavior patterns corresponding to diagnostic categories of disturbed children.
Publication plans: A monograph or even a book, if financially assisted, is being planned.
Duration: September 1960-April 1962.
Principal investigator: Boleslaw A. Wysocki, Ph.D., Associate Professor of Psychology, Newton College of the Sacred Heart, Newton 59, Mass.

16-L-2 DEVELOPMENT OF A TECHNIQUE FOR STUDYING AND A PILOT STUDY OF BEHAVIOR AND BRAIN WAVES.

Purpose: (1) To develop a technique for the sound motion picture photography of behavior and telemetered brain waves. (2) To do a pilot study of the application of this technique to the clinical study of children with mental disorder and electroencephalographic disturbance.

Subjects: Children from the Inpatient Service of the Langley Porter Neuropsychiatric Institute.
Methods: Use of a special sound camera for recording behavior and telemetered electroencephalograms.
Publication plans: Article by R. Vreeland et al., Electroencephalography and Clinical Neurophysiology (in press); findings presented to California Medical Association, 1962, and submitted to American Journal of Psychiatry.
Duration: October 1961-June 1962.
Principal investigator: A. J. Gianascol, M.D., Senior Psychiatrist, Langley Porter Neuropsychiatric Institute, and Assistant Clinical Professor of Psychiatry, University of California School of Medicine, San Francisco, Calif.
Cooperating group: C. L. Yeager, M.D., Director of Electroencephalography Laboratory, Langley Porter Neuropsychiatric Institute.

16-L-3 HABITUATION AND MOTOR CONTROL IN EMOTIONALLY DISTURBED CHILDREN

Purpose: To study basic processes of adaptation and control in response to sudden stimulation among different diagnostic categories of emotionally disturbed children, and to study effects of psychotropic drugs on these processes.
Subjects: Approximately 100 emotionally disturbed children referred to an outpatient treatment facility and approximately 80 children in residential treatment facilities for disturbed and homeless children.
Methods: On the basis of rating scales, symptom checklists and psychiatric interview, subjects are diagnosed as neurotic (inhibited, withdrawn, anxiety symptoms) or as hyperkinetic (acting-out, restless, poor control). Subjects are subjected to a rapid discrimination test during which time measurements are made by a pneumopolygraph of ability to execute simple motor responses. They are given a series of loud noises and motor control is measured and compared to initial level. Stimulant and depressant drugs are given and the effects on motor control noted.
Findings: Preliminary data indicate slower rates of adaptation among hyperkinetic children.
Publication plans: To be submitted to Journal of Abnormal and Social Psychology.
Duration: May-November 1962.
Principal investigators: Leon Eisenberg, M.D., Professor of Child Psychiatry, and C. Keith Conners, Ph.D., Instructor in Medical Psychology and Pediatrics, Johns Hopkins Hospital, Baltimore 5, Md.
Cooperating groups: Esther-Loring Richards Center, Owings Mills, Md.; Cylburn Home for Children, Baltimore; Harriet Lane Home for Children, Johns Hopkins Hospital.

16-L-4 READING SKILLS IN EMOTIONALLY DISTURBED, INSTITUTIONALIZED ADOLESCENTS

Methods: Clinical records and test data of 74 Western State Hospital patients who met certain requirements (age, race, I.Q., tests available) were examined. The able readers (43.2 percent) were compared with the disabled readers (31.1 percent of total group).
Findings: Factors previously reported to be etiologically important in reading disability were for the most part not confirmed by this study. A disproportionate number of boys again appear as reading problems. "General gross verbal incapacity" was the only symptom of Rabinovitch's "Primary Reading Retardation" syndrome that differentiated the poor from the able reader. In marked contrast to previously reported data, atypical birth and visual problems occurred significantly more often among the adequate readers. Reports of previously reported investigations involving a pattern analysis of either the Wechsler-Bellevue or the Bender Gestalt could not be replicated in this study.
Duration: Completed 1962.
Principal investigator: Helen E. Shimota, Ph.D., Clinical Psychologist, Mental Health Research Institute, P.O. Box 907, Ft. Steilacoom, Wash.

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16-L-5 EFFECTS OF GEOGRAPHICAL MOBILITY AND PARENT PERSONALITY FACTORS ON EMOTIONAL DISORDERS IN CHILDREN

Purpose: To determine whether incidence of geographical mobility is a significant factor in the development of emotional disorders in military children; to determine parent personality variables and parent-child relationship factors which interact with geographical mobility in emotionally disturbed military children. Previous reports indicate a significant relationship between mobility and psychiatric casualty rates, but social class factors have been consistently confounded with mobility rates.
Subjects: Emotionally disturbed male dependents, ages 11 to 15 years, referred to the Child Psychiatry Service, Walter Reed General Hospital; normal male military dependents, matched with respect to child's age, family socio-economic level, and paternal occupational area.
Methods: A detailed interview is employed to obtain data on family relocations, changes in residence, changes in school placement, etc. Information on father's absence is also being secured for control purposes. Several questionnaire techniques, including scales developed specifically for the project, are administered to parents and children to obtain data on parent personality variables and parent-child relationships.
Duration: January 1962-August 1963.
Principal investigators: Captain Frank A. Pedersen, Ph.D., Chief Psychologist, and Captain Eugene J. Sullivan, M.S.W., Child Psychiatry Service, Walter Reed General Hospital, U. S. Department of Defense, Washington 12, D. C.
Cooperating group: Army Medical Reserach and Development Command, U. S. Department of Defense.

16-L-6 STUDY OF FAMILIES OF CHILDREN IN RESIDENTIAL TREATMENT

Purpose: In the families studied, there is: (1) a relinquishing of the executive guidance function by the parents; and (2) a sibling subsystem with its own values, existing in dynamic opposition to the parents. It is assumed that these factors are of crucial importance in the lack of development of internal controls in the child. Therapeutic objectives are to improve communication between parents and siblings, institute or restore executive functioning in the parents and to utilize the dynamics of the sibling subgroup towards positive influences upon the child.
Subjects: Families of low socio-economic status, with sons in a residential treatment center serving boys between the ages of 8 and 14, and with more than one acting-out child--37 families will be studied diagnostically and 10 families will be carried for two years in therapy.
Methods: Research team has designed a multiple-therapist technique involving a team of three therapists. The family can be seen as a whole and separated into its component parts in one multistage session. This allows work with the siblings as a subgroup in the absence of the parents.
Duration: January 1962-December 1963.
Principal investigators: Salvador Minuchin, M.D., Director, Continued-Care Program, Charles H. King, M.S.W., Director of Social Services, and Edgar H. Auerswald, M.D., Clinical Director, Wiltwyck School for Boys, Inc., 271 W. 125th St., New York 27, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-7 A STUDY OF INTERPERSONAL RELATIONS WITHIN FAMILIES

Purpose: To determine the effects of family unit composition and sequence upon the amount and kind of data that can be obtained concerning family transactions and their impact on the child-patient.
Subjects: 24 primary families, selected according to stated criteria, who are seeking aid from Craig House for child and/or family emotional difficulties.
Methods: Each family will be interviewed in six units--the family together, parents together, each parent separately, referred child alone, all siblings together. Interviews will be stereophonically recorded on tape. Interviewers will report family dynamics, significant family incidents, interpersonal perceptions, family relationships, conflict areas, and family dynamics

relative to the child-patient's problems. Clinical judges will audit the tapes and record their judgments in the same five categories. All factors of family, family unit, sequence, interviewer, and judge selection and scheduling will be so randomized as to minimize any systematic bias. Qualitative and quantitative analyses will be made of the data recorded by interviewers and judges.
Publication plans: Probably in 1965.
Duration: September 1962-September 1965.
Principal investigator: Edward J. Carroll, M.D., Medical Director, Craig House for Children, 201 S. Craig St., Pittsburgh 13, Pa.

16-L-8 A STUDY OF THE EARLY ENVIRONMENT OF ALCOHOLICS AND ITS RELATIONSHIP TO ADULT BEHAVIOR

Purpose: To investigate dependent and independent variables of alcoholism, and their interrelations by differentiating certain types of alcoholics from nonalcoholics on the basis of environmental stimuli impinging upon them during the first 10 years of life. To explore relationship of adult behaviors, other than alcoholism, to these early experiences.
Subjects: Alcoholics and controls, matched for sex, age, education, Wechsler-Bellevue I.Q., and vocation, and selected on basis of scores on University of Tennessee Alcoholism Scale.
Methods: Intensive interviewing using Pascal-Jenkins Behavioral Scales which yield ratings based on actual behavior, not on opinions or attitudes of subjects. Interviewers elicited accounts of manifest behavior of parents, grandparents, siblings, and peers (referred to as stimuli) in such areas as frequency of contact, physical punishment, displays of affection, physical health, religious observance, and marital compatibility. Variables were rated as to whether or not they deviated from expectancy for the status of the particular stimulus under observation. Further study was made of cross-sesional behavior at the time of observation. This behavior was then compared across and within populations
Publication references: Quarterly Journal of Studies on Alcohol 21:1:40-50, March 1960.
Duration: July 1958-July 1962.
Principal investigators: Gerald R. Pascal, Ph.D., Professor, William O. Jenkins, Ph.D., Professor, and Clifford H. Swensen, Ph.D., Associate Professor, Department of Psychology, University of Tennessee, Knoxville, Tenn.
Cooperating groups: Psychological Services Center, University of Tennessee; Tennessee State Alcoholism Commission.

16-L-9 INTELLECTUAL DEFICIT IN SCHIZOPHRENIA

Purpose: Hypotheses: (1) the adult schizophrenic functions at a lower intellectual level than he did in childhood; and (2) the childhood I.Q. of the adult schizophrenic is lower than that of his peers from the same neighborhood and year (Part of an overall study on schizophrenic intelligence listed in Bulletin 15, Research Relating to Children.)
Subjects: Hospitalized schizophrenics from both veterans' and State hospitals for whom childhood intelligence test scores were available. Second grade scores on the Kuhlmann-Anderson Group Intelligence test were available for subjects used to test hypothesis (2).
Methods: Second grade Kuhlmann-Anderson I.Q.'s of 31 hospitalized schizophrenics were compared with their Wechsler-Bellevue I.Q.'s taken after they were hospitalized as adults, by means of a t test. The mean of the second grade Kuhlmann-Anderson I.Q.'s for a sample of 70 schizophrenics was compared with that of the mean of all second grade children in Cleveland Public Schools tested in November 1949. Results for each child who was to be an adult schizophrenic were compared to results for his own homeroom to control for neighborhood, ethnic background, and socio-economic status. In both cases, the childhood I.Q.'s scores of the schizophrenics-to-be were lower than the city average as a whole and lower than the medians of their own homerooms.
Publication references: Presented at American Psychological Association meeting, 1962; Ph.D. dissertation on file at Western Reserve University library.
Duration: Completed.
Principal investigators: Jeanette Reuter (Ph.D. Candidate, Western Reserve University), Lecturer, University of Maryland European Branch, Victoriastr. 3, Kronberg/Ts, Germany; George W. Albee, Ph.D., Professor, and Ellen A. Lane, Ph.D., Research Associate, Department of Psychology, Western Reserve University, Cleveland 6, Ohio.

Cooperating groups: Western Reserve University; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-10 STUDY OF CHILDHOOD SCHIZOPHRENIA USING PIAGET AND PSYCHOANALYTIC THEORIES

Purpose: To study early ego development.
Subjects: Schizophrenic children, 3 to 10 years of age.
Methods: Observations in a school for emotionally disturbed children (Clerk). Rorschach studies of mothers of schizophrenic children (Lavoie).
Publication plans: Publication in 1963.
Duration: 1960-1963.
Principal investigators: Gabrielle Clerk, Ph.D., Assistant Professor, and Germain Lavoie, Ph.D. Candidate, Department of Psychology, University of Montreal, Montreal, Que.

16-L-11 EXPERIMENTAL RESEARCH IN INTERPERSONAL RELATIONS: II. A THEORETICAL AND METHODOLOGICAL BASIS FOR STUDY OF CHILDHOOD PSYCHOSES

Purpose: Application of a new method for obtaining quantified data on location and progression of the child's interest in a standardized play situation to the study of the significance of home visits.
Subjects: Children diagnosed as schizophrenic, presently residing in the children's unit at Camarillo State Hospital.
Methods: Assessment on a continuous basis of the child's interest patterns, utilizing a four-channel impulse recorder.
Findings: Preliminary findings indicate the method, which yields objective data, is sensitive to clinical differences among the children.
Publication plans: Preliminary publication to be submitted shortly; further publications may be expected in 1964.
Duration: September 1962-September 1964.
Principal investigator: Michael Nesbitt, Ph.D., Clinical Psychologist II, Camarillo State Hospital, Camarillo, Calif.
Cooperating group: California State Department of Mental Hygiene.

16-L-12 BEHAVIOR AND COMMUNICATION IN CHILDHOOD SCHIZOPHRENIA

Purpose: An attempt to treat and study a small group of schizophrenic children and their parents. Its purpose is to demonstrate an approach toward understanding these children, their parents, and particularly their pathological interactions. It focuses on problems of communication and uses the therapist's relevant inner reactions to give meaning to his "objective" observations. An essential aspect of this approach is the close collaboration and communication among the total staff which sustains the therapist through crises and the necessarily disturbing experiences in his therapy with these families. The need for such a project arose out of the necessity to help and understand severely disturbed children living at home, for whom residential placement was unavailable or had proved to be unsuccessful.
Subjects: Project envisions a Day Care Center for about 15 school age children with an educational and recreational program which will be an integral part of the total therapeutic environment.
Methods: Extensive records will be kept on individual therapy of each child and his parents as well as of child's behavior and progress at school. Clinical data will be analyzed to confirm or refute tentative hypotheses. It is hoped that, more than proving or disproving the original ideas, results will make possible the definition of new concepts and formulation of testable hypotheses about some aspects of childhood schizophrenia.
Duration: 1962-1967.
Principal investigators: Itamar Yahalom, Annette Klein, M.A., and staff, Jewish Children's Bureau, 1 S. Franklin, Chicago 6, Ill.
Cooeprating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-13 EDUCATIONAL REHABILITATION OF CHILDHOOD SCHIZOPHRENICS

Purpose: (1) To demonstrate that it is possible to program for seriously disturbed children in a community setting and, while assisting them educationally, to help them develop emotional impulse controls; (2) to demonstrate that this can be accomplished at a cost of little more than the annual per pupil cost for children generally; (3) to identify the factors operative on an ongoing basis which enable this project to succeed, and subsequently to enable the children to make a successful transition to the regular school program; and (4) to identify the impact of the program on the community generally.
Subjects: Childhood schizophrenics; children with a diagnosis of chronic brain syndrome; and combinations thereof.
Methods: Identification and tabulation of educational materials and methods, analysis of costs, etc.; use of two school psychologists and the psychiatric consultant to observe quantify and analyze psychological factors operative; use of informants to identify impact on the community.
Duration: June 1962-June 1963.
Principal investigators: George T. Donahue, M.A., Assistant to Supervising Principal, and Sol Nichtern, M.D., Psychiatrist, Union Free School District #16, Town of Hempstead, Elmont, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-14 A FOLLOW-UP STUDY OF CHILDREN WITH EARLY EMOTIONAL DISORDERS

Purpose: A follow-up study of approximately 60 children who experienced emotional problems during their preschool years. All of these children attended a therapeutic nursery school associated with the Department of Psychiatry of the School of Medicine at Western Reserve University, where they received individual therapy or their mothers received extensive guidance in addition to the educational program at the nursery school. Present study will attempt to determine their adjustment in various areas, by means of psychiatric interviews, interviews with parents and teachers, and analysis of school records. It is also hoped that the effect of their nursery school experience upon their present adjustment can be determined.
Duration: September 1962-August 1964.
Principal investigators: Anny Katan, M.D., Professor of Child Analysis, Department of Psychiatry, Marvin Ack, Ph.D., Assistant Professor of Psychology in Psychiatry, and 12 child analysts, University Hospitals, Western Reserve University, Cleveland, Ohio.
Cooperating group: Grant Foundation.

16-L-15 DAY CARE CENTER FOR DISTURBED ADOLESCENTS

Purpose: Demonstration project for emotionally disturbed adolescents in a psychiatric center to provide: (1) an alternative to inpatient treatment; and (2) a setting for effective prevocational and vocational rehabilitation.
Subjects: Adolescents, ages 14 to 21,referred by the Rhode Island State Division of Vocational Rehabilitation.
Methods: Descriptions of organization and process of service. Selected studies of social-demographic, and clinical backgrounds of patients. Follow-up after discharge.
Publication references: Mental Hygiene 46:223-229, April 1962.
Duration: June 1960-June 1965.
Principal investigators: Charles H. Jones, M.D., Superintendent, Butler Hospital, and Harold W. Pfautz, Ph.D., Associate Professor, Department of Sociology and Anthropology, Brown University, Providence, R.I.
Cooperating groups: Butler Hospital; Rhode Island State Division of Vocational Rehabilitation; Office of Vocational Rehabilitation, U. S. Department of Health, Education, and Welfare.

16-L-16 GROUP THERAPY WITH AUTISTIC CHILDREN

Purpose: To demonstrate a method to increase verbal communication and social interaction in autistic children.
Methods: Method consists of a group therapy procedure which combines autistic children with children who, though emotionally handicapped, are more ego-intact, reality-oriented, and verbal. This procedure is conducted within a total therapeutic milieu which is directed toward building ego strength and reality concepts and toward providing a variety of situations in which the autistic child can experiment and expand the skills, first learned in the group sessions, in verbal communication and social interaction. The demonstration project centers about the observation and collection of data of the two different, but related, aspects of the program--group therapy sessions and total complex of relationships among the children and between staff members and the children. Major emphasis of detailed observation will be placed upon group therapy sessions in which a research observer will record the interactions of the children and the therapist. Analysis of results will lead to a careful account of the therapeutic processes involved which could be utilized in other settings treating similar types of children.
Duration: 1962-1965.
Principal investigators: Louise L. Wiener, Executive Director, East Bay Activity Center, 2525 Perkins Rd., Oakland, Hubert S. Coffey, Ph.D., Associate Professor of Psychology, University of California, Berkeley, and Christoph M. Heinecke, Ph.D., Research Associate, Psychiatric Clinic, Mt. Zion Hospital and Medical Center, 1600 Divisadero St., San Francisco 15, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-17 INTERMEDIARY GROUP TREATMENT OF INACCESSIBLE CHILDREN

Purpose: Clinical study to investigate effectiveness of selected, described techniques of psychiatric group social work treatment in readying inaccessible children for usual child guidance outpatient individual treatment.
Subjects: Children aged 6 to 11, found by trial to be inaccessible to usual outpatient office-interview treatment.
Methods: Certain ego deficiencies believed to be common to these children and central to their inability to use individual treatment are described. Group social work treatment techniques being developed, using particular activity media, are directed toward remedying the specified ego deficiencies. These techniques will be applied during six months of biweekly group social work treatment, during which children will be seen in small groups in the Guidance Center. Measurements will be made of these interventions and of their observed effectiveness in promoting development of the designated ego functions. At the close of group treatment, each child will be offered three months of individual treatment, with application of accessibility measurements to test for improvement in capacity to use the usual guidance clinic individual outpatient treatment. Data analysis will be reported primarily in case analysis form.
Duration: January 1962-June 1964.
Principal investigators: Claire M. Ness, M.D., Director, and Grace Ganter, D.S.W., Psychiatric Group Therapist, and staff, Cleveland Guidance Center, Inc. 2050 E. 96th St., Cleveland 6, Ohio.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-18 MUSIC THERAPY PROJECT FOR PSYCHOTIC CHILDREN UNDER SEVEN

Purpose: (1) Through specific music techniques, to establish contact with and introduce speech and other forms of simple reality to relatively speechless, negativistic, or withdrawn psychotic children; and (2) to study and evaluate responses to the music therapy experience. Theoretical considerations: music involves sounds, rhythm, time, repetition, motor expression, essentially basic and preverbal in nature. Psychotic children project their inner emotional state through the nature of the rhythms they evidence on percussion instruments and through other motor behavior.

Methods: Music therapy in Day-Care Unit setting. After determining the child's rhythmic pattern and frequency, music, matching and following the child's basic beat, is improvised. Once interest is mobilized in this way, the child is led to follow changes of tempo toward a more normal regularity and rate. Gradually, increasingly complex elements of musical structure are added--melodic and harmonic rhythms, dissonances, retards, "question and answer" phrases, etc. These require increasing attention span, concentration, frustration tolerance, impulse control, and sound tolerance, resulting in gratification and security via mastery and establishment of relationship with the therapists. Individualized songs relating to the child's affective state introduce simple reality concerning things, feelings, and behavior. Lyrics stimulate imitative and communicative speech. Results are being analyzed by clinical evaluation of rate of change of general behavioral capacities using a behavior rating scale for specific variables.
Duration: May 1962-March 1965.
Principal investigators: Mitchell L. Dratman, M.D., Assistant Professor and Chief, Section of Child Psychiatry, and Bertram A. Ruttenberg, M.D., Director of Day-Care Unit and Associate, Department of Psychiatry, University of Pennsylvania, 3400 Walnut St., Philadelphia 4, Pa.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-L-19 THE EFFECTS OF CHLORPROMAZINE ON THE BEHAVIOR AND INTELLECTUAL PERFORMANCE OF HYPERACTIVE CHILDREN

Purpose: To obtain information which will increase our understanding of the hyperactive syndrome in children and to study the effects of chlorpromazine on the behavioral and intellectual functioning of a group of hyperactive children.
Subjects: Hyperactive children, ages 7 to 12 years. (Hyperactivity is defined as pathological state of overactivity and excitability together with marked distractability.) Normal control subjects, ages 7 to 12 years.
Methods: A large battery including clinical ratings, teacher ratings, school observations, I.Q. tests, perceptual motor tests, frustration-tolerance tests, concept-formation tests.
Duration: 1962-1965.
Principal investigators: Virginia I. Douglas, Ph.D., Assistant Professor of Psychology, McGill University, and Senior Psychologist, Montreal Children's Hospital; Drs. John Werry and Gabrielle Weiss, Psychiatrists, Montreal Children's Hospital, Montreal, Que.
Cooperating groups: McGill University; Montreal Children's Hospital; Smith, Kline, and French Drug Company

16-L-20 PREDICTION OF TREATABILITY OF ACTING-OUT CHILDREN FROM PSYCHOLOGICAL TESTS

Purpose: To determine whether it is possible to predict from psychological tests which children are most likely respond to psychotherapy.
Subjects: Cases selected from clinic files of past year--six treatment cases and six nontreatment cases.
Methods: At present, establishment of test criteria by which to verify whether there is a psychological test difference between the treatment and nontreatment cases.
Publication plans: Nothing definite; often, material at this clinic is mimeographed.
Duration: Summer 1962-indefinite.
Principal investigators: Vita Krall, Ph.D., Staff Psychologist, Jerome J. Schiller, Ph.D., Chief Psychologist, and Elwyn Smolen, M.D., Director, Child Guidance Clinic of Greater Bridgeport, Inc., 1081 Iranistan Ave., Bridgeport, Conn.

Delinquency

16-M-1 PSYCHOLOGICAL CHARACTERISTICS OF DELINQUENTS ON THE HAND TEST

Purpose: Preliminary study to ascertain whether the same variables, and by implication their psychological concomitants, which distinquished antisocial adults on the Hand Test (a new projective technique described in a monograph by Bricklin, Piotrowski, and Wagner) could also be used to differentiate normal and delinquent teenagers.
Subjects: 15 male and 15 female convicted juvenile offenders gathered randomly from the Juvenile Testing Center, Akron, Ohio; 30 controls drawn from three Akron high schools, matched for sex and age.
Methods: Administration of the Hand Test to each subject and computation of an "acting-out" ratio (an algebraic score obtained by subtracting the socially cooperative interpersonal responses from the socially negative or uncooperative interpersonal responses).
Publication references and plans: Preliminary report presented at Eastern Psychological Association meeting, 1962; cross-validation study now underway.
Duration: April 1961-April 1962.
Principal investigators: Edwin E. Wagner, Ph.D., Department of Psychology, University of Akron, 302 E. Buchtel Ave., and Mrs. R. Snyder, Juvenile Court, 650 Dan St., Akron, Ohio.

16-M-2 AN ANALYSIS OF INTERCORRELATIONS AMONG ADJUSTMENT SCORES ATTAINED BY DELINQUENTS ON INDEPENDENT AND EXPERIMENTAL MEASURES BASED ON THE LUKER INDEX

Purpose: Hypotheses: (1) a population of delinquents from ages 16 to 40 show maladjustment as measured by the Rotter Incomplete Sentence Blank; (2) there is a similarity in the adjustment of the delinquent group and the maladjustment of the college population; and (3) there is a relationship between counselors' ratings of stages of progress as developed by Dr. Arno Luker and the 12-card sort administered to the client.
Subjects: Population of 25 delinquents on probation being counseled by the Practicum groups of Colorado State College.
Findings: Pretesting as measured by the Rotter ISB showed 65 percent of the delinquents to be maladjusted. The Pearson r correlation revealed a relationship of .61 between the maladjusted of the college population and the maladjusted of the delinquents. Although incomplete, preliminary findings show significant agreement between counselors', supervisors', and clients' ratings. According to the Luker measure, a client passes through 12 stages in gaining self-autonomy. Additional agreement is indicated by the fact that the mean numbers of stages of progress as rated by the counselees was 8.92. The 12-card sort indicated 12 of the clients had completed therapy.
Duration: Spring 1961-June 1962.
Publication plans: University Microfilms.
Principal investigator: Florence Esther Doyle, Ed.D. Candidate, Colorado State College, Greeley, Colo. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-3 THE YOUTHFUL DYER ACT OFFENDER: AN ETIOLOGICAL STUDY

Purpose: An attempt to describe the etiology of juvenile auto theft (short-history offender), on the basis of an assumed status problem relating to adult masculinity. A complex questionnaire is being administered, comparing long-history delinquents with short-history offenders.
Duration: Not reported-summer 1962.
Principal investigator: Martin L. Dosick, A.M., Assistant Professor, Southern Illinois University, Carbondale, Ill. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: U. S. Probation and Parole Offices in the Midwest; Federal Bureau of Prisons, U. S. Department of Justice.

16-M-4 DETERMINANTS OF SEX-ROLE IDENTIFICATIONS OF HOMOSEXUAL FEMALE DELINQUENTS

Purpose: To investigate factors responsible for some girls assuming passive roles and other aggressive roles in a homosexual relationship.
Subjects: Sample of 28 aggressive and 23 passive homosexual delinquent girls.
Methods: Rorschach, TAT, DAP, and M-F Scale from MMPI administered. Two checklists were devised, one for use by psychologists and the other for social workers. The former was filled out on the basis of the tests and the latter on the basis of case histories and interviews. Reliability of judges was found significant beyond the .01 level. Frequency of "yes-no" responses was evaluated by Chi-square. Strength of the "yes" responses was evaluated by a t ratio.
Findings: It was found that passive girls perceived their mothers as threatening and that they identified with them. The aggressive girls found fathers threatening and identified with them. All girls were rejected by their mothers and the mother was the dominant person in the family. A conclusion was made that for homosexual behavior to develop, the girl must be rejected by the mother and be in conflict with one or the other parent. An aggressive-dominant mother and passive-indifferent father will tend to create a passive homosexual girl and a passive-inadequate mother and aggressive-dominant (protesting his masculinity) and sexually threatening father will tend to create an aggressive homosexual tendency in girls already weakened by severe rejection.
Publication plans: Possible publication in Journal of Projective Techniques in 1963.
Duration: 1959-May 1962.
Principal investigator: Stephen J. Howard (Ph.D. Candidate, University of Southern California) Clinical Psychologist II, Los Angeles State Mental Hygiene Clinic, Los Angeles, Calif. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-5 THE SELF-CONCEPTS OF JUVENILE DELINQUENTS WITH SEXUAL DEVIATIONS

Purpose: To determine if any common self-concept structure exists among juveniles arrested for sex crimes including rape, prostitution, homosexuality, and sodomy. The hypothesis was that a basic self-awareness led to overt denial of sexual mores as a compensation mechanism.
Subjects: 82 cases.
Methods: Complete psychological studies and determination of statistical significance between self-concept and type of aberration.
Findings: Results suggest that an inadequate self-concept (self-sufficiency) is most likely to be expressed by prostitution or homosexual behavior. Rape and sodomy seem to include other personality factors not included in the self-concept structure. More study of these aspects is in progress and will require more data.
Publication plans: Publication planned at termination of project.
Duration: 1953-summer 1963.
Principal investigators: John S. Schell, Ed.D., Clair Saylor, and Mrs. Bertha Bright, Department of Psychology, Edinboro State College, Edinboro, Pa. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating group: Mercer County Courts.

16-M-6 A STUDY OF THE ACCURACY OF THE SELF-CONCEPT OF JUVENILE DELINQUENTS

Subjects: Two groups of delinquents from the District of Columbia institution for delinquents, Cedar Knoll School, and a control group from the Prince Georges County, Maryland, public schools.
Methods: A self-estimate sheet was designed which allowed the subjects to estimate their academic and physical ability as compared to the group of which they were a member. In addition, two social tests allowed the subjects to reflect how they saw themselves as well as how the group saw them. After completion of the self-estimate sheets, the subjects were tested and the number of correct estimates made by each subject was determined for the academic and physical areas. A score was also computed for each of the social tests.

Duration: Not reported-December 1962.
Principal investigator: William E. Amos, Ed.D., Superintendent, Cedar Knoll School, Laurel, Md.

16-M-7 SOCIAL CLASS DIFFERENTIALS IN SELF, VALUE, AND OPPORTUNITY ORIENTATION AS RELATED TO DELINQUENCY POTENTIAL

Purpose: To construct scales dealing with the awareness of limited opportunity theory of Cloward and Ohlin, and the value orientation theory of Cohen, and to relate these two theories and other socialization and self variables to delinquency potential.
Subjects: Approximately 1,500 middle and lower class sixth and ninth grade white and Negro boys and girls, primarily from Columbus, Ohio, but also from California and Kentucky.
Methods: Four questionnaire pretests utilized to build two scales. A final 10-page questionnaire consisting of five scales and groups of items administered to 1,030 Columbus, Ohio, sixth and ninth graders. Subjects selected to give age, race, sex, and social class differentials.
Findings: Significant associations were found between delinquency potential and (1) rejection of middle class values, (2) feelings of limited opportunity or limited chances for success in the future, (3) unfavorable self-concepts, and (4) a low level of interpersonal competence. Sex, age, and class differences have also been found.
Publication plans: Journal publication is anticipated.
Duration: August 1961-August 1962.
Principal investigator: Judson R. Landis (Ph.D. Candidate), Assistant Professor of Sociology, Ohio Wesleyan University, Delaware, Ohio.
Cooperating groups: Ohio State University Delinquency Research Project; Ford Foundation.

16-M-8 VALUES OF HIGH ACHIEVING AND DELINQUENT ADOLESCENTS

Purpose: To determine similarities and differences in values of high achieving and delinquent groups as compared to a group of "average" adolescents.
Subjects: Students in one high school with an enrollment of 1,000.
Methods: Groups selected by a panel of high school administrators. Data gathered by use of questionnaires and interviews.
Publication references and plans: Preliminary findings in Bulletin of Secondary School Principals, November 1961; further findings to be published as part of a forthcoming book.
Duration: September 1959-September 1962.
Principal investigator: Stuart Palmer, Ph.D., Associate Professor of Sociology, University of New Hampshire, Durham, N. H.
Cooperating group: Central University Research Fund, University of New Hampshire.

16-M-9 A CONCEPTUAL FRAMEWORK FOR JUVENILE DELINQUENCY

Purpose: To formulate a conceptual framework for delinquency and a corresponding strategy by examination of the various theories of the nature and etiology of delinquency, theories, for example, of its relation to lower class morality, to the economic level, to a general lowering of moral standards, to a society inured to warfare and to the preparation for warfare.
Duration: May 1962-November 1963.
Principal investigator: Robert M. MacIver, D.Ph., National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group: National Institute of Mental Health.

16-M-10 TO TEST RECENT AMERICAN THEORIZATION ON DELINQUENCY AND OPPORTUNITY; DELINQUENT SUBCULTURES IN EAST LONDON

Methods: (1) Statistical: analysis and comparison of all indictable and selected nonindictable offenses committed by males and females between the ages of 8 and 25 in two East London boroughs in the year 1959-60. (2) Interview: 100 twenty-one year old males in each borough to be interviewed on the basis of random sample selection from the electoral registers. (3) Participant observation: field work to be carried out in each borough with adolescents, with a view to eliciting their expression of attitudes and values, and in order to observe their scheme of behavior and general social orientation. Material from (2) and (3) will be gathered with the intention of clarifying and adding to information in this country on delinquent subcultures, youth culture, the gang, and the concept of anomie.
Publication references: British Journal of Criminology 1:4:376, April 1961.
Duration: October 1960-December 1962.
Principal investigators: David M. Downes, B.A., and Dr. T. P. Morris, Sociology Department, London School of Economics, London, England. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-11 PSYCHOSOCIAL CASE STUDIES OF JUVENILE DELINQUENTS IN THREE SUBCULTURES

Methods: Using the Warner Index of Status Characteristics (validated in the local community) three delinquent youths, each representative of his respective social class were selected for intensive study. Several other delinquent youth, representative of their social class, were selected for less intensive investigation as checks of the extended studies. Three devices were employed in gathering the case study data: (1) Investigator's Guide, patterned after that standardized by the Gluecks; (2) an extensive questionnaire probing the same areas of behavior solicited by the investigator's guide; and (3) a "life history" guide designed to get the subject's own life story as he saw it. Items (1) and (2) were filled out using information provided by persons in contact with the youths such as teachers, police officers, peers, etc.
Findings: It was found that the upper middle and lower class youth did not differ significantly from one another, or from their own observers, but there was a significant difference at the .05 percent level of confidence in the responses when all the delinquent's responses were compared to all the observers' responses. It was concluded that the feelings held by delinquents are relatively the same, but the manner in which these feelings originated was different.
Publication references: University Microfilms.
Duration: Completed 1961.
Principal investigator: John J. Mirich, D.Ed. Candidate, Colorado State University, Fort Collins, Colo. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-12 MIDDLE CLASS DELINQUENCY

Purpose: (1) To investigate the delinquency of a sample of middle class high school students; and (2) to test four theories of middle class delinquency. Hypotheses are derived from each theory and are to be tested statistically.
Methods: Anonymous checklist of delinquency items; questionnaire; and interviews.
Publication plans: To be submitted as a doctoral dissertation.
Duration: 1961-1964.
Principal investigator: Edmund W. Vaz (Doctoral Candidate), Department of Sociology, McMaster University, Hamilton, Ont.

16-M-13 MIDDLE CLASS DELINQUENT YOUTH--A STUDY OF FAMILIES

Purpose: To explore the intrafamily relationships and the families' community relationships, in order to understand family patterns and other factors contributing to rebellious and antisocial behavior of youth.

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Subjects: 100 intact middle class families, each having at least one boy or girl between 13 and 18 years of age who is delinquent or presenting seriously delinquent behavior. For purposes of study, "intact family" implies that parents or parent-surrogates are both present in the home and have a stable marriage of at least three years' duration.
Methods: Diagnostic report and recommendations for treatment, or for management of the delinquent youth, will be made to referring physicians and agencies. A selected number of families studied will be offered appropriate therapy within the University of Texas Medical Center. Examining methods include the team-family method of study and treatment, reported under title Multiple Impact Therapy (Bulletin 5, Research Relating to Children), supplemented by sociological data.
Duration: September 1962-August 1965.
Principal investigators: Harold A. Goolishian, Ph.D., Associate Professor and Chief, Division of Psychology; Eugene C. McDanald, M.D., Associate Professor, Robert MacGregor, Ph.D., Research Director, Mrs. Agnes M. Ritchie, Chief Psychiatric Social Worker, and Alberto C. Serrano, M.D., Psychiatrist, Youth Development Project, University of Texas Medical Branch, Galveston, Tex.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-M-14 FAMILY PATTERNS OF ADOLESCENT LAWBREAKERS

Purpose: Problem: Who, in terms of variables such as geographical mobility, income, stability of home, race, etc., are the official delinquents in San Francisco?
Methods: All available information was coded on all 1960 official San Francisco delinquents. This will be correlated with census data.
Findings: Indicated bi-modal distribution--40 percent from traditionally disorganized home and 40 percent from what appear to be stable middle class homes. Ecological studies will be followed up with intensive interviews and questionnaires.
Duration: February 1961-indefinite.
Principal investigator: Ralph Lane, Jr., Ph.D., Assistant Professor, Department of Sociology and Social Welfare, University of San Francisco, San Francisco 17, Calif. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-15 YOUTH RESEARCH PROJECT: DELINQUENCY AND SOCIAL COHESION

Purpose: Hypotheses: Higher juvenile delinquency rates will be found in those areas of a city where: (1) general morale of adults is lower; (2) social distance between generations is greater; (3) accessibility to illegitimate means is higher; (4) accessibility to legitimate means is lower; (5) concern by officials is viewed as less; (6) where the discrepancy between aspiration and achievement is higher; (7) informal neighborhood controls are lower.
Duration: Summer 1961-summer 1962.
Principal investigator: Raymond L. Gorden, Ph.D., Chairman, Department of Sociology and Anthropology, Antioch College, Yellow Springs, Ohio. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Metropolitan Studies, Inc.; Ford Foundation.

16-M-16 AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN THE QUALITY AND QUANTITY OF JUVENILE ILLEGAL CONDUCT AND AGE LEVEL, COMMUNITY TYPE, SEX, SOCIO-ECONOMIC STATUS AND SEVERAL ATTITUDINAL VARIABLES

Purpose: To measure legally deviant behavior (especially theft) of juveniles by age groups, 11 through 18, and to determine its relationship to types of communities (emphasis on socio-economic class structure), sex, and specific age level. It is hypothesized that differences will be found in nature and extent of illegal conduct depending upon community and sex and age level within these communities, and depending upon the value orientation and attitudes of the respondents.

Subjects: 1,129 public school children in rural, small industrial, wealthy suburban, working class, and very large urban communities.
Methods: In addition to description of theft (what was taken, from where, which persons knew of it at the time, and what was done with the stolen material), instruments were constructed to measure value orientations, feelings of alienation, attitude toward law enforcement, extent of socialization, concept of self as good or bad person, ability to defer gratification, degree of "theft association," extent to which goals are thought to be attainable without conflict with the law, as well as some personal data. Data were gathered by self-administered questionnaires. Guttman-type scaling procedures and multivariate analysis will be used after preliminary examination of the data.
Publication reference and plans: American Sociological Review, December 1962; two other articles submitted for publication.
Duration: April 1961-June 1963.
Principal investigators: John P. Clark, Ph.D., Assistant Professor, and Eugene Wenninger, A.M., Research Assistant, Department of Sociology, University of Illinois, Urbana, Ill. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Research Board, University of Illinois; Ford Foundation.

16-M-17 URBAN-RURAL DIFFERENTIALS IN DELINQUENCY AND CRIME

Purpose: Hypothesis: Criminal and juvenile court cases and institutional commitments are higher in the urban counties of Iowa than in the rural counties in terms of rates per 10,000 population.
Methods: Data have been used on court cases and commitments from the 99 counties. Counties have been classified according to five groups in terms of size. Data cover a 20-year period for commitments and a 10-year period for court cases.
Duration: 1959-1962.
Principal investigator: Walter A. Lunden, Ph.D., Professor, Department of Economics and Sociology, Iowa State University of Science and Technology, Ames, Iowa. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Iowa State Board of Control; Iowa State University of Science and Technology.

16-M-18 A STATISTICAL STUDY OF JUVENILE DELINQUENCY IN INDIANAPOLIS, 1948-50, 1958-60

Purpose: To determine: (1) to what extent statistical factors found to be associated with official juvenile delinquency in Indianapolis agree with those found to be associated with delinquency in Baltimore (1940) and Detroit (1950); (2) how differences in the Baltimore and Detroit findings can be reconciled; (3) whether there are additional variables which will provide a clearer picture of the factors associated with juvenile delinquency; and (4) to what extent statistical factors associated with delinquency are consistent over time for the same city.
Methods: Computation of delinquency rates and a set of economic, demographic, and social variables (indices of area characteristics) and the computation of their intercorrelations (zero order correlation coefficients). Factor analysis and multiple regression analysis of these results.
Findings: Preliminary: Although conditions unique to particular cities do appear, the results, in general, indicate a good deal of uniformity among cities (after some necessary corrections are made), and suggest the continuing importance of a relatively small number of housing and economic variables.
Publication references: University Microfilms.
Duration: September 1960-August 1962.
Principal investigator: Roland J. Chilton (Ph.D. Candidate, Indiana University), Assistant Professor of Sociology, Florida State University, Tallahassee, Fla. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Department of Sociology and Research Committee, Indiana University; Marion County Juvenile Court.

16-M-19 EPIDEMIOLOGIC VECTORS OF DELINQUENCY AND ITS CONTROL

Purpose: (1) To develop a technique that may at the same time be applied to the assessment of the impact of community programs on the incidence of juvenile delinquency and to the acquisition of more precise knowledge than now exists concerning certain epidemiological vectors of delinquency. (2) To study these epidemiological vectors in New York City at a number of different time points. (3) To apply the technique to the assessment of the impact of slum clearance and public housing projects in the decade 1950-60 on juvenile delinquency. (4) To develop the base data for the evaluation of several large scale delinquency prevention programs (e.g., Mobilization for Youth and St. Mary's Park Neighborhood projects).
Duration: 1960-not reported.
Principal investigator: Isidor Chein, Ph.D., Professor of Psychology, New York University, Washington Square, New York, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-M-20 RACIAL GROUP MEMBERSHIP AND JUVENILE DELINQUENCY

Purpose: To investigate relationships between racial group membership and juvenile delinquency among white and Negro boys. The ethnic relations and delinquency literature both suffer from a lack of empirical data about the subjective responses of minority group delinquents to their minority group position. Therefore, this project is designed to supply the need for materials that will help to qualify or corroborate current theories in the field of delinquency.
Subjects: White and Negro boys, aged 12 to 14, residents of a State training school in Maryland.
Methods: Data will be elicited by means of both standard and projective interviews. Data will be coded to enable systematic comparisons of the responses of various groups, and to construct typologies of delinquent behavior and of modes of interracial relations, and to relate these areas to each other.
Duration: June 1962-June 1963.
Principal investigator: Bernard E. Segal, Ph.D., Instructor in Sociology, Goucher College, Towson 4, Md.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-M-21 JUVENILE DELINQUENCY AND PUBLIC OPINION

Purpose: An exploratory study to determine the nature of public opinion concerning trends in juvenile delinquency, the major reasons for these trends, and the role of particular situational factors in contributing to delinquency.
Methods: Random distribution of 100,000 questionnaires throughout the 92 counties of Indiana. Study findings are based on data obtained from 19,129 returned questionnaires which offer a fair representation of the Indiana population. The public opinion response for each question has been compared to professional evidence (research findings, statistical data, and/or criminological opinions).
Findings: An informed opinion (defined operationally as concurrence with the professional evidence) is more prevalant than an uninformed one. Significant correlations were found on the basis of cross-tabulations of the data for marital status, age, and sex variables. Two particular interpretations, ego-involvement and social change, are suggested to explain the difference of opinion of respondents of diverse social backgrounds.
Publication references and plans: Presently available as a mimeographed monograph; further publications are planned.
Duration: October 1955-January 1962.
Principal investigator: Gordon J. DiRenzo, M.A., Assistant Professor of Sociology, Fairfield University, Fairfield, Conn.
Cooperating groups: University of Notre Dame; Indiana Governor's Council on Children and Youth; Ford Foundation.

16-M-22 LANE COUNTY YOUTH STUDY PROJECT

Purpose: To study: extent of delinquency in county's rural and small city areas; how it differs from delinquency problem in large cities; potential use of public schools as delinquency prevention centers. Later phase will be directed toward developing a community youth program with dovetailed services in education, employment, recreation, law enforcement, and social services.
Methods: Initially, surveys of delinquents, high school youth, adults, and personnel of community agencies.
Publication plans: Journal articles, monographs, and mimeographed materials are expected.
Duration: August 1962-February 1964.
Principal investigators: Kenneth Polk, Ph.D., Department of Sociology, Edgar Brewer, M.A., and Donald Call, Ph.D. Candidate, University of Oregon, Eugene, Oreg.
Cooperating groups: University of Oregon; Welfare Administration, U. S. Department of Health Education, and Welfare.

16-M-23 MOBILIZATION FOR YOUTH: PREVENTION AND CONTROL OF DELINQUENCY BY EXPANDING OPPORTUNITIES

Purpose: A major experimental and demonstration program to attack the problem of juvenile delinquency in a congested depressed area of the Lower Eastside of New York to provide evidence of the effectiveness of certain activities directed to altering or changing some undesirable social conditions.
Duration: 1959-indefinite.
Principal investigators: James E. McCarthy, Administrative Director, George A. Brager, Action Director, and Richard A. Cloward, Ph.D., Research Director, Mobilization for Youth, Inc. 214 East Second St., New York 9, N. Y.
Cooperating groups: Social, educational, religious and civic institutions; Columbia University; National Institute of Mental Health, Public Health Service, and Office of the Special Assistant, U. S. Department of Health, Education, and Welfare.

16-M-24 IDENTIFYING THE SCHOOL VANDAL

Purpose: (1) Survey of large school systems for background information on numbers, cost, and preventive measures, with regard to school vandalism; (2) study of 64 cases of vandalism over a two-year period, involving 114 subjects who have been identified. Their school records are being analyzed in an attempt to find distinguishing characteristics.
Duration: Spring 1961-spring 1962.
Principal investigators: Rodney E. Nowakowski, Ed.D. Candidate, and Sam Ersoff, Ed.D., Professor of Education, University of Miami, Coral Gables, Fla. (Reported in *Current Projects in the Prevention, Control and Treatment of Crime and Delinquency*, 1962.)
Cooperating group: Miami Board of Public Instruction.

16-M-25 AN INVESTIGATION OF THE INFLUENCE OF THE GUIDANCE PROGRAM OF A JUNIOR HIGH SCHOOL UPON DELINQUENT'S CLASSROOM BEHAVIOR

Purpose: To evaluate guidance programs of New York City junior high schools.
Subjects: Juvenile delinquents in New York City junior high schools.
Methods: Experimentally varied guidance programs offered to junior high school students defined as juvenile delinquents. Statistical computation of differences in scores on behavior rating scales to determine if a significant difference exists following enrollment in any of the varied guidance programs.
Publication plans: Available on interlibrary loan from New York University Library.
Duration: September 1961-August 1962.

Principal investigator: Beverly Lipschitz (Ed.D. Candidate, New York University), Guidance Counselor, P. S. 260, 875 Williams Ave., Brooklyn 7, N. Y.
Cooperating groups: New York University; New York City Board of Education.

16-M-26 DEMONSTRATION COUNSELING PROJECT

Purpose: An experimental program consisting primarily of recreation activity, group and individual counseling. Primary interest will be focused on three areas in the assessment of change: institutional adjustment; interboy relationships (including clique structure); and intrapsychic changes within boys.
Subjects: One cottage of 75 randomly selected boys at the National Training School; second cottage of 75 randomly selected boys following the regular institutional program to serve as control group; third group of 30 boys, scattered throughout the remaining cottages to serve as a secondary control.
Methods: All counseling is done by nonprofessionals selected from the officers of the regular custodial staff. The counselors are supervised in all aspects of the program by professional personnel on the research staff, as well as by outside consultants. Pre- and post-measures will be taken on all groups. Demographic, sociometric, and psychometric measures will be obtained.

Duration: October 1961-1964.
Principal investigators: Robert B. Levinson, Ph.D., Director, Howard L. Kitchener, M.S.W., Co-director, and Donald A. Swicord, M.A., Research Assistant, National Training School for Boys, Bladensburg Rd. and South Dakota Ave., N.E., Washington, D. C. (Reported in *Current Projects in the Prevention, Control and Treatment of Crime and Delinquency*, 1962.)
Cooperating group: Federal Bureau of Prisons, U. S. Department of Justice.

16-M-27 PSYCHOSOCIAL INTERVENTION INTO DEVIANT ADOLESCENT SUBCULTURES

Purpose: Bridging concepts between socio-analytic and socio-cultural theories of emotionally disturbed delinquent children; evolving a treatment program based on a work formulation of the interrelationship of personality and social structures, referred to as the "triple bind."
Subjects: 17 emotionally disturbed adolescents living together in a cottage at Hawthorne Cedar Knolls School, a residential treatment center.
Methods: Participant observation, interviewing, psychometry, clinical assessments, development of experimental film procedures.
Findings: Delinquent boys are caught in a "triple bind." They oppose staff authority by varying forms of subversion. In their own group, through identification with the "aggressor," they create stereotyped, coercive relationships. These two systems reinforce the boys' pathological defenses. An attempt has been made to demonstrate that the gang code evolves from the struggle of the residents against the staff, in the authoritarian management by peers of one another, and that both processes are rooted in each boy's pathological defenses and developmental history. Their interrelationships can be summarized as follows: the boys' conflict with society is qualitatively strengthened by their combinations in the peer culture. They transform individual opposition into collective antagonism to societal norms. In their peer social structure the delinquent leadership imposes severe controls upon compeers. The boys' social system is reinforced through mutually supportive transferences in what is referred to here as a fantasy social system. Society's suppression of the peer group reinforces the entire circular process.
Duration: May 1962-May 1965.
Principal investigator: Howard W. Polsky, Ph.D., Hawthorne Cedar Knolls School, Jewish Board of Guardians, Hawthorne, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-M-28 CASEWORK WITH FAMILIES OF INSTITUTIONAL DELINQUENTS

Purpose: A pilot study to determine (1) if parents of boys first admitted to Wisconsin School for Boys would be willing to accept social casework services during period of institutionalization of boys; and (2) if families willing to accept casework services had the ability to use the proferred services. Goal will be to measure effectiveness of attempts to improve the home situation to which the boys will return.
Methods: Information was obtained from the routine statistical reporting of the Bureau of Research and from the process-recording of interviews, using a social data sheet developed for the project. The two factors of "willingness" and "ability" were related to characteristics recorded on the social data sheets.
Publication references: Mimeographed report of findings available from the Bureau of Research.
Duration: June 1960-November 1961.
Principal investigators: John W. Mannering, M.S., Chief, and Paul H. Kusuda, M.A., Social Research Analyst, Bureau of Research, Wisconsin State Department of Public Welfare, 270 State Office Bldg., Madison, Wis.; Hercules M. Porter, Executive Assistant, and Vernon L. Robinson, Research Assistant, Wisconsin Service Association, Milwaukee, Wis.

16-M-29 THE TREATMENT OF FAMILIES OF DELINQUENT ADOLESCENTS THROUGH CONJOINT FAMILY THERAPY

Purpose: To prevent further acts of delinquency and to observe interaction in delinquent families.
Subjects: Families of delinquent adolescents including mother, father, and all children in family 12 years or older.
Methods: Family therapy including psychological evaluations before and after therapy.
Findings: Pilot study suggests possible patterns of change in family interaction following conjoint family therapy.
Duration: September 1961-September 1963.
Principal investigator: Jerome V. Rose, M.D., Research Associate, Mental Research Institute, Palo Alto Medical Research Foundation, 777 Bryant St., Palo Alto, Calif.
Cooperating group: Rosenberg Foundation.

16-M-30 THE EFFECTIVENESS OF GROUP THERAPY IN THE REHABILITATION OF JUVENILE NARCOTIC ADDICTS

Purpose: To test the hypothesis that group psychotherapy is an effective modality in the rehabilitation of juvenile narcotic addicts.
Subjects: Five therapy groups, each consisting of from five to eight inpatients at Riverside Hospital (except for one "mixed" group utilizing nonaddicted college students).
Methods: Each group included a nonparticipating, observer-recorder, and the recording techniques were standardized. Regular seminars were held to discuss the progress of the groups. The presence of integrative and disintegrative forces within the group, of factors which tended to contribute to formation of group cohesiveness, of motivations of individual patients to form a working, therapeutic group and to continue this experience after their discharges from the hospital were all evaluated. These were correlated with such intragroup factors as group composition, personality of group therapist, and internal structure of the group. Several groups showed disintegrative forces early, while others coalesced into working groups which were continued on an outpatient basis. An attempt is being made to assess the significant variables accounting for these differences.
Publication plans: Manuscript for publication in preparation.
Duration: August 1960-completed.
Principal investigators: Arnold Zucker, M.D., Robert Osnos, M.D., Hyman Kachalsky, M.D., David Laskowitz, Ph.D., Ferdinand Jones, Ph.D., and staff, Riverside Hospital, New York, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating group: Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University.

16-M-31 YOUTHFUL OFFENDER STUDY--A REVIEW OF THE PROBLEM OF YOUTH CRIME WITH SPECIFIC REFERENCE TO TREATMENT METHODS AND NEEDS FOR THE YOUNG OFFENDER ABOVE THE STATUTORY JUVENILE COURT AGE

Purpose: Adolescence has always been recognized as a period of great change in the individual's development, a period of new found strength and drives, during which the turmoil and energy of youth often results in aggressive and criminal behavior. This study will explore these behavioral problems, and the ways in which the community and the administration of justice respond, specifically in the methods of handling the treatment of the youthful offender above the statutory juvenile court age. The study will seek to identify treatment needs and suggest patterns of response.
Duration: 1960-1963.
Principal investigators: Milton C. Rector, Director, Sol Rubin, Legal Consultant, and Ben Overstreet, Jr., Consultant, National Council on Crime and Delinquency, 14 E. 23rd St., New York 10, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Advisory and working group of specialists representing the various disciplines concerned (police, courts, probation, detention, institutional treatment, parole, education and community organization); Babcock Foundation.

16-M-32 A STATEWIDE STUDY OF JUVENILE AND ADULT CORRECTIONAL PROGRAMS IN THE STATE OF DELAWARE

Purpose: To take inventory of existing services to juvenile and adult law violators in Delaware, both public and private. The field work revealed much duplication of administrative effort, and a dearth of good correctional services. Hopefully, the study report will provide a blueprint for action in the establishment of an overall administrative agency for governmental services in correction, evaluate the effectiveness and the need for the halfway house program operated by Prisoners Aid Society, and give direction to future programs of the Prisoners Aid Society.
Publication references: Vol. I (Adult Corrections) and Vol. III (Court and Institutional Services for Juveniles) published December 1962; Vol. II (The Prisoners Aid Society) to be published March 1963.
Duration: June 1961-March 1963.
Principal investigators: Willis O. Thomas, Eastern Regional Consultant, National Council on Crime and Delinquency, 44 E. 23rd St., New York 10, N. Y., Austin H. MacCormick, Sc.D., Executive Director, Osborne Association, Inc., 114 E. 30th St., New York 16, N. Y., Charles Shireman, M.A., Assistant Professor, School of Social Service Administration, University of Chicago, Chicago 37, Ill., and Abraham Novick, Superintendent, New York State Girls Industrial School, Hudson, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Delaware Prisoners Aid Society; Citizens Committee on Delaware Corrections; National Council on Crime and Delinquency; Delaware Crime Commission.

16-M-33 FEDERAL YOUTH OFFENDER STUDY

Purpose: Extensive study of persons received from the courts who entered an institution during the first full year of operation under the Federal Youth Corrections Act.
Subjects: 323 committed youth offenders received during the fiscal year which ended June 30, 1955.
Methods: Study consists of four major parts: (1) the offenders themselves; (2) the institution phase of their treatment and training; (3) the parole phase; (4) correlations between the various factors which are tabulated.
Publication references: Annual reports, U. S. Board of Parole, 1958 and 1959.
Duration: July 1954-1963.
Principal investigator: James C. Neagles, A.B., Staff Director, Board of Parole, U. S. Department of Justice, Washington 25, D. C. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-34 THE CHARACTERISTICS AND RESPONSE TO TREATMENT OF JUVENILES RELEASED FROM THE REHABILITATION FACILITIES OF THE STATE OF WASHINGTON

Purpose: To obtain information concerning the characteristics, background, time spent within the institutions, and the rate of recidivism of those juveniles who were paroled from the rehabilitation facilities of the State of Washington.
Methods: Specific factors examined were age at date of parole, race, general intelligence, living arrangement prior to commitment, county of commitment, reason for referral, prior record, months spent in residence and months spent on parole. Comparisons were made between recidivists and parolees as a whole.
Duration: October 1961-February 1962.
Principal investigators: Duane W. Sturges, B.A., Research Analyst, and Evan A. Iverson, Ph.D., Chief, Research and Program Analysis Section, Washington State Department of Institutions, Olympia, Wash. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-35 EVALUATION OF SOUTHFIELDS, AN INSTITUTION FOR DELINQUENT CHILDREN

Purpose: To compare treatment results of Southfields (an institution modeled after Highfields in New Jersey) with probation and treatment at another institution.
Subjects: Delinquent boys, ages 16 to 18, nonpsychotic, nonbrain-damaged, of at least low normal intelligence, who have no previous record of time spent in a correctional institution.
Methods: Adjudicated delinquent boys are divided into institutional and probationary groups. The institutional group is further divided, half going to Southfields and half to another institution. Groups are to be compared as to recidivism rates. Design worked out to control for selection of groups.
Duration: March 1961-March 1967.
Principal investigator: Lovick C. Miller, Ph.D., Associate Professor of Medical Psychology, Department of Psychiatry and Mental Health, University of Louisville School of Medicine, and Chief Psychologist, Child Guidance Clinic, Inc., 206 E. Chestnut St., Louisville, Ky. (Reported by John F. Ice, M.D., Medical Director, Child Guidance Clinic, Inc.)
Cooperating groups: Jefferson County Juvenile Court; Kentucky State Department of Child Welfare; Ford Foundation.

16-M-36 JUVENILE DELINQUENCY AND THE ADMINISTRATION OF YOUTH JUSTICE

Purpose: To uncover some of the criteria used by police, probation officers, judges, teachers, psychiatrists, etc., in making correctional decisions such as: (1) the definition of the role of the delinquent; and (2) the disposition of specific cases of juvenile delinquency.
Subjects: Official delinquents; official nondelinquents; and the above-mentioned groups.
Methods: Questionnaires.
Publication plans: Will appear in sociological journals, as well as in publications dealing with crime and delinquency.
Duration: Spring 1962-fall 1963.
Principal investigator: Peter G. Garabedian, Ph.D., Assistant Professor of Sociology, Washington State University, Pullman, Wash.
Cooperating group: State of Washington (Initiative Measure No. 171).

16-M-37 A COMPARATIVE ANALYSIS OF AGENTS OF DELINQUENCY CONTROL

Purpose: To describe and compare the orientations to delinquency causation and control among those occupations whose members are concerned with delinquency as part of their work.
Subjects: Police chiefs, juvenile bureau policemen, juvenile probation officers, and juvenile court judges in each of 28 communities in Eastern Massachusetts.

Methods: Data are drawn from taped interviews, attitude scales, sociometric data on relations with other occupational categories, etc. Part of the analysis focuses on differences within occupational categories, part on the differences between them, and part on relations between occupations in different types of communities.
Duration: Spring 1960-summer 1964.
Principal investigator: Stanton Wheeler, Ph.D., Assistant Professor, Department of Social Relations, Harvard University, Cambridge 38, Mass. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Field Foundation: Ford Foundation.

16-M-38 THE PSYCHOLOGICAL NEEDS OF YOUNG PROBATIONERS

Purpose: Hypothesis: The prognosis for first offenders below the age of 21 can be related to the level of the psychological needs of each offender.
Findings: Initial results indicate that male probationers under 21 demonstrate a relationship between their psychological needs and the behavior demonstrated prior to the criminal offense.
Duration: January 1961-June 1962.
Principal investigators: Paul A. Lane, Ph.D., Associate Professor of Psychology, University of Bridgeport, Bridgeport 4, Conn., and William Hacker, Probation Officer, Connecticut State Department of Adult Probation, Hartford, Conn. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-39 A FOLLOW-UP STUDY OF BOYS PUT ON PROBATION

Purpose: To relate subsequent offenses to degree and type of maladjustment and delinquency-proneness as assessed in school.
Subjects: All Glasgow boys under age 15 put on probation for the first time during 1957.
Methods: Maladjustment was assessed by the Bristol Social Adjustment Guide, Day School edition (D. H. Stott and E. G. Sykes, University of London Press, London, 1956); delinquency-proneness assessed by the Delinquency Prediction Instrument (D. H. Stott, as above, 1960).
Findings: To date, the more maladjusted and delinquency-prone are tending to commit significantly more offenses subsequent to probation.
Duration: January 1958-1966.
Principal investigators: D. H. Stott, Ph.D., Lecturer in Psychology, University of Glasgow, A. Sinclair, and D. Wilson, Probation Officers, Glasgow City Probation Department, Glasgow, Scotland.

16-M-40 A STUDY OF FAIRNESS IN JUVENILE PROBATION SERVICES

Purpose: To establish a working definition of "fairness to juveniles;" to determine the feasibility of using the objective approach to study fairness to juveniles by probation officers; and to elicit suitable implications for improving conditions of practice relating to fairness through education and training of officers.
Subjects: Panel of 20 nationally recognized probation experts including judges, administrators, psychiatrists, social workers, and professors (used for validation of suitability of the 21 Criteria of Fairness). Two groups of probation officers from the same agency, 13 and 21 in number, contrasted according to whether or not they were social work-educated (used to select test items which distinguish on basis of a fairness score between social work-educated and nonsocial work-educated probation officers).
Methods: (1) A list of 21 Criteria of Fairness was submitted to panel of experts for appraisal and responses were analysed to produce an "index of acceptability" for each criterion; (2) a 210-item objective test of fairness, based on the Criteria, was given the contrast groups. Comparative responses of each group were statistically analysed

item by item to select items that discriminate between the groups; and (3) using the resultant discriminating items, analysis was made of responses of social work-educated in comparison with "ideal fairness" answers.
Findings: (1) The 21 Criteria were generally acceptable to the panel of experts; (2) 50 of the original 210-items were found to discriminate between the contrast groups of social work-educated versus nonsocial work-educated officers; and (3) in the demonstration study, it was shown that social work-educated officers had better "fairness scores" than nonsocial work-educated in only 60 percent of the discriminating items. Several implications for education and training were found.
Publication references and plans: At present, an abridged report is available upon request from the author. Microfilm available through University of Minnesota Library. An article is in preparation for Federal Probation; other articles are planned.
Duration: May 1960-May 1962.
Principal investigator: Paul Ture Steen (Ph.D. Candidate, University of Minnesota), Executive Director, Community Services Council, 3875 Florida Blvd., Baton Rouge 6, La.

16-M-41 THE INFLUENCE OF SIMILAR SOCIO-ECONOMIC BACKGROUNDS UPON THE EFFECTIVENESS OF THE PROBATION OFFICER ROLE IN THE REHABILITATION OF JUVENILE DELINQUENTS

Purpose: Hypothesis: a Probation Officer will perceive a juvenile as having a good prognosis if their values are not too disparate, and will perceive another juvenile as having a poor prognosis if their values and mobility aspirations are extremely disparate.
Subjects: 35 female Deputy Probation Officers, randomly selected; 70 female juvenile court wards, aged 15 through 17, nominated by the Probation Officers.
Methods: Each officer named one child as having the best prognosis in her caseload and one as having the poorest prognosis. Interviews averaging one and one-half hours each were conducted on a schedule designed to demonstrate the Probation Officer's ingenerational mobility, her professional aspirations, her social values, and a sentence completion test designed to discover covert attitudes. A similar schedule was used for the juveniles. The projective material will receive a reliability check before coding and analysis of data is undertaken.
Duration: August 1960-September 1961.
Principal investigator: Francesca Alexander, Ph.D. Candidate, University of Southern California, Los Angeles, Calif. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: Los Angeles County Probation Department; University of Southern California; Ford Foundation.

16-M-42 PRERELEASE AND AFTERCARE SERVICE

Purpose: A three-year demonstration project designed to provide intensive casework services to a small group of boys and their families while the boys are at the Alabama Boys Industrial School. All applicable community resources are utilized in helping the individual child. It is felt that intensive work with and for the child such as that given in this project will aid in the reduction of continued delinquency and will reduce recidivism. If the project proves successful, hopefully, the institution will be able to incorporate a similar but expanded prerelease and aftercare service to include every child leaving the institution into all parts of the state.
Findings: Evaluation data have not yet been compiled to reflect complete findings but much progress has been apparent.
Publication plans: Present plans are to compile results at the end of the three-year demonstration project and to have these available upon request.
Duration: December 1961-December 1964.
Principal investigators: Alex Darabaris, M.S.S.W., Director of Social Service, and Robert Thompson, M.S.S.W., Social Worker, Alabama Boys Industrial School, Birmingham 6, Ala.
Cooperating groups: Citizens Advisory Committee: Jefferson County Coordinating Council, Family Counseling Association, Jefferson County Juvenile Court, Birmingham City Board of Education, Meyer Foundation, U. S. Probation Office, Alabama State Employment Service, Jefferson County Association of Mental Health, Jefferson County Mental Health Clinic; other individuals and community agencies.

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16-M-43 FOLLOW-UP ON AFTERCARE STUDY--1959 RELEASES FROM WISCONSIN SCHOOLS FOR BOYS AND WISCONSIN SCHOOL FOR GIRLS

Purpose: To find factors which are related to recidivism of releasees from the Wisconsin School for Girls and Wisconsin Schools for Boys.
Methods: Factors are being reported for each offender released from the training schools. In a later study it is planned to combine the items that are most related to being returned or not into an aftercare experience table.
Publication plans: Publication by Bureau of Research.
Duration: May 1961-March 1963.
Principal investigators: John W. Mannering, M.S., Chief, Paul H. Kusuda, M.A., Social Research Analyst, and Dean V. Babst, Social Research Analyst, Bureau of Research, Wisconsin State Department of Public Welfare, 270 State Office Bldg., Madison Wis. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)

16-M-44 SELECTING ADOLESCENTS FOR FORESTRY CAMP PLACEMENT

Purpose: Initial goal was to improve the weeding out of subjects who adjusted poorly in forestry camps. Amended goal is now to better determine the particular type of receiving institution in which subjects will most benefit, as well as least benefit. The use of such information will supplement present data submitted to a "review board" which makes individual dispositions, but will be more generally used after long-term refinement.
Subjects: All juvenile males 14-0 years and over who were sent to youth forestry camps from the diagnostic center at Ft. Worden.
Methods: Boys were administered the IPAT High School Personality Questionnaire while at the center. Later, at the forestry camps to which they had been sent, the boys were rated on 25 dimensions gleaned from a list of 54 behavioral areas by rank ordering by camp counsellors. The average rating of 8 to 12 raters was then correlated with the HSPQ factors. These correlations were then used to predict ratings on other ratees.
Findings: Tentative findings suggest that some, but not all, of the HSPQ factors correlate with some of the scales, and that use of all factors in various specification equations look promising on prediction of at least eight rating scales.
Publication plans: Initially, a report to Washington State Bureau of Juvenile Rehabilitation, mimeographed copies of which will be available later in the year. HSPQ normative and validating material, and/or rating reliability studies may be published later in a journal.
Duration: March 1961-September 1962.
Principal investigators: Robert Folkes Kelly, M.A., and Vernon O. Tyler, Jr., Ph.D., Clinical Psychologist, Ft. Worden Center, Port Townsend, Wash.
Cooperating group: Institutions within the Washington State Bureau of Juvenile Rehabilitation.

EDUCATIONAL PROCESS

General

16-N-1 A STUDY OF VALUES OF HIGH SCHOOL STUDENTS AND THEIR TEACHERS

Purpose: (1) To determine if personal and occupational values of students change during the high school years; (2) to find the extent to which communications between teachers and their students are affected by value patterns.
Subjects: 3,000 high school freshmen and 300 freshmen teachers in 10 central California high schools. These same students will continue in the study as sophomores and as seniors.
Methods: Each year students complete a personal information form, the Differential Values Inventory (Richard Prince, University of Chicago), and Occupational Values Inventory developed from an instrument used by R. Centers (The Psychology of the Social Classes). Teachers of these students complete the above forms and also Study of Values (Allport-Vernon-Lindzey).
Publication plans: Plans are to publish resumés in various educational journals during the study.
Duration: September 1962-June 1966.
Principal investigator: Orville E. Thompson, Ph.D., Associate Professor, Department of Agricultural Education, University of California, Davis, Calif.
Cooperating group: Cooperative Research Program, Office of Education, U. S. Department of Health, Education, and Welfare.

16-N-2 STUDY OF PUPIL MOBILITY IN NEW YORK CITY

Purpose: To analyze mobility patterns in each school group resulting from pupil migrations to and from places outside New York City and from the intracity movements of the school population. To identify school districts with high and low mobility rates. To study the size, composition and direction of pupil movements in school districts having high mobility rates.
Subjects: Public school population, kindergarten through grade 12, by school group and borough.
Methods: Statistical analysis.
Duration: September 1959-June 1963.
Principal investigator: Bureau of Educational Program Research and Statistics, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.
Cooperating group: Bureau of Attendance, Division of Child Welfare, New York City Board of Education.

16-N-3 FACTORS IN EDUCATIONAL ASPIRATION AND ACHIEVEMENT

Purpose: To investigate social and social-psychological factors which are related to differences in the educational aspirations and achievements of youth. More specifically, aims are: (1) To investigate the relationship between the educational plans of a large probability sample (10,000 cases) of Wisconsin high school seniors, and socio-economic status, intelligence, rural-urban background, sex, and selected other factors in the family situation, school environment, and community. Multivariate analysis procedures will be employed to determine the relationship of these variables to educational aspirations. (2) To study the sources of variation in educational aspiration and achievements within socio-economic classes, using variables referred to above. (3) To select and follow a group of high ability students over a five-year period to determine relationship between socio-economic status, other background characteristics and, for those who go on to college, the kinds of colleges they attend, academic success in college, and future occupational aspirations; for those who do not go on to college, their entry into the

job market, their beginning career patterns and job and life adjustments. (4) To study intensively a group of students in one school system to obtain information on the operation of the decision process as it involves the decision to continue education beyond high school. (5) To study intensively the career patterns of a small sample of high ability girls.
Duration: 1962-1967.
Principal investigators: William H. Sewell, Ph.D., Professor of Sociology, and Oluf M. Davidsen, Assistant Registrar and Lecturer in Education, University of Wisconsin, Madison 6, Wis.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-N-4 SOCIAL FACTORS IN EDUCATIONAL ACHIEVEMENT AND ASPIRATIONS AMONG NEGRO ADOLESCENTS

Purpose: To study factors associated with the variation in educational performance of Negro students in the Southern states, and to study antecedents and correlates of educational aspirations among Negro youth in selected Southern communities.
Methods: The first part of the study will use the county as the unit of analysis. Indices of educational performance will be constructed from such components as dropout rates and age-grade retardation. Information available from census reports will be introduced in an attempt to discover sources of variation in these performance rates. Purpose will be to devise a regression formula that explains performance variation. Second part will undertake to determine current educational plans and needs of Southern Negro youth and to increase our understanding of the sources of educational aspiration. Interview and questionnaire information will be obtained from parents and students at the high school level in communities selected to represent the range of educational performance as determined by the first part of the study. It is expected that high educational aspirations are related not only to types of parent-child relationships but to certain expectations concerning future opportunity structures and patterns of race relations.
Duration: 1958-1962.
Principal investigators: Charles E. Bowerman, Ph.D., Chairman, Department of Sociology and Anthropology, and Research Professor, Institute for Research in Social Science, and Ernest Q. Campbell, Ph.D., Associate Professor of Sociology and Research Associate, Institute for Research in Social Science, University of North Carolina, Chapel Hill, N.C.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-N-5 RELATIONSHIP BETWEEN SCHOOL-COMMUNITY COORDINATING PROCEDURES AND EDUCATIONAL MOTIVATION AND BEHAVIOR OF SCHOOL CHILDREN

Purpose: General question to be explored: What conditions of interaction between the school, the family, and the neighborhood account for variations in educational motivation and school behavior? To this end, crucial family types, neighborhood types, administrative styles, and mechanisms of coordinating school-community relations have been defined. These variables taken together are formulated so as to make a prediction of children's educational motivation and school behavior under the following general hypothesis: optimum social control (educational motivation) will result when coordinating mechanisms develop that balance of relationships between bureaucratic organizations (schools) and external primary groups (family and neighborhood) that is at a midpoint--not too intimate and not too distant. From this general hypothesis, limited and specific hypotheses have been specified to deal with the variety of families and neighborhoods the school must confront in such populations as Southern white migrants, unemployed dissolving families, middle class professional families, etc.
Duration: August 1962-August 1965.
Principal investigators: Eugene Litwak, Ph.D., Associate Professor of Social Welfare Research, and Henry J. Meyer, Ph.D., Professor of Social Work and Sociology, University of Michigan, Ann Arbor, Mich.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-N-6 MENTAL HEALTH CONSULTATION IN PUBLIC SCHOOLS

Purpose: To conduct an inservice training program for school administrative personnel in using consultation as a resource for the early discovery and management of problems of pupil behavior, staff adjustment, and parent guidance, and concurrently to evaluate the methodology and outcomes of the program. Specifically: (1) to improve resources for discovering and managing problem situations in order to avoid the development of destructive behavior, unproductive relationships and procedures, and increases in mental health problems; (2) to clarify concepts and procedures of collaboration among school and related personnel toward solving mental health problems; and (3) to broaden the authority concept and leadership techniques of key individual school figures and principals.
Methods: Program will consist of an overlapping series of two-year institutes, workshops, and supervised field consultation experiences for small groups of school personnel, particularly school principals. Evaluation will be accomplished by before-and-after measurements, periodic review by eminent authorities in mental health and education, and analyses of the continuous documentation of the work.
Duration: January 1962-December 1965.
Principal investigators: Irene C. Hypps, Ph.D., Assistant Superintendent, Department of Pupil Appraisal, Study and Attendance, District of Columbia Public Schools; Robert G. Kvarnes, M.D., Executive Director, Washington School of Psychiatry, Arnold Peterson, Ph.D., Clinical Psychologist, St. Elizabeth's Hospital, U. S. Department of Health, Education, and Welfare, Washington, D. C., and Stanley Jacobsen, M.A., Supervisor of Psychological Services, Prince Georges County Board of Education, Upper Marlboro, Md.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-N-7 MENTAL HEALTH PROJECT FOR INDIAN BOARDING SCHOOLS

Purpose: A seven-year study to include: an epidemiological study of mental illness incident in a boarding school population; consultative services to key personnel working with these children both in the schools and to the field personnel; stimulation of a variety of methods and activities on behalf of the mentally ill.
Subjects: 1,200 off-reservation Indian boarding school students of the Northern plains.
Methods: A clinical research team consisting of psychiatrist, clinical psychologist, psychiatric social worker and social scientist based at the Flandreau Indian Vocational High School with field units of psychiatric social worker and public health nurse at Flandreau and the boarding grade schools at Pierre and Wahpeton, North Dakota. The research and field units would collaborate concurrently with existing Federal, State, local, and private agencies in the study, diagnosis, and treatment of the problem areas with recommendations for implementing corrective procedures.
Duration: 1962-1966.
Principal investigators: Thaddeus P. Krush, M.D., Clinical Director, Community Services, Nebraska Psychiatric Institute, Omaha, Nebr., and John W. Bjork, Clinical Social Worker, Public Health Service Indian School Health Center, Flandreau, S. Dak.
Cooperating groups: State University of South Dakota School of Medicine; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-N-8 INFLUENCE OF TYPE OF SCHOOL ON INDIAN PERSONALITY

Purpose: (1) To compare effects of the boarding school and the day school upon Indian students--the immediate effects in terms of behavior and attitudes of students presently enrolled in both types of schools and long-range effects in terms of behavior and attitudes of adult graduates of both types of schools. (2) To study attitudes of Indian families toward the day school and the boarding school. (3) To study some effects of institutional living upon personality. (4) To secure and provide data for those formulating Indian education policy.

Subjects: Navaho, Hopi, and Papago Indians who are attending or have attended either day schools or boarding schools.

Duration: March 1962-March 1964.

Principal investigators: Robert A. Roessel, Jr., Ed.D., Assistant Professor of Education, and Director, Indian Education Center; Gerard V. Haigh, Ph.D., Associate Professor of Psychology, and Bruce S. Meador, Ph.D., Assistant Professor of Education, Arizona State University, Tempe, Ariz.

Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-N-9 FORMAL EDUCATION IN AN AMERICAN INDIAN COMMUNITY

Purpose: Within the context of a Sioux Indian community, research will be oriented about the following types of questions: What role do Indian young people see formal education as playing in their careers and lives? What role do their educators see it as playing? By what patterns of interaction are these notions of "education" and "educability" communicated between teachers and students? How, and to what extent, do leaders of community opinion affect what occurs in the schoolroom and the educational ambitions of Indian young people?

Methods: Classroom interaction in the primary grades will be observed and analyzed. Semi-structured interviews will be conducted with a sample of 100 Indian children, aged 13 to 21, and with all administrators and a large sample of teachers in the school systems serving the community. Significant elders in the families of children both attending and not attending school will be interviewed in unstructured fashion.

Duration: August 1962-July 1963.

Principal investigators: Murray Wax, Ph.D., Associate Professor of Sociology, Anthropology, and of Teacher Education, Rosalie H. Wax, Ph.D., Research Associate, Department of Sociology and Anthropology, and Gerald OneFeather, Research Assistant, Emory University, Atlanta 22, Ga.

Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-N-10 AN EVALUATION OF THE "OPEN ENROLLMENT" AND "SCHOOL UTILIZATION" PROGRAMS

Purpose: To evaluate effect of programs upon pupil achievement in reading, pupil acceptance by receiving schools, and pupil satisfaction in the new school situation.

Subjects: Third, fourth, and fifth grade pupils participating in the programs.

Methods: Administration of achievement, attitude, and sociometric tests.

Duration: December 1960-not reported.

Publication references: Interim report issued in 1962.

Principal investigator: Joseph Justman, Ph.D., Acting Director, Bureau of Educational Program Research and Statistics, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.

16-N-11 THE EXTENT AND EFFECTIVENESS OF THE CONTRIBUTIONS OF A NURSERY SCHOOL TO THE DEVELOPMENT OF PRESCHOOL AGE CHILDREN

Purpose: To determine the appropriateness of behavioral adaptations of young children in a specialized nursery school where modes of management are individually suited.

Subjects: All children enrolled at the Early Childhood Center of Brooklyn College since 1960.

Methods: Assessment of six areas of behavior from annual summary records made by teachers on each child. Longitudinal case studies.

Duration: September 1961-undetermined.

Principal investigators: Clara Loomanitz, M.A., Director, Early Childhood Center, and Pearl Meissner, Ph.D., Professor, Department of Psychology, Brooklyn College, City University of New York, Brooklyn 10, N. Y.

16-N-12 A FIELD DEMONSTRATION OF THE EFFECTIVENESS AND FEASIBILITY OF EARLY ADMISSION TO SCHOOL FOR MENTALLY ADVANCED CHILDREN

Purpose: To demonstrate effectiveness and feasibility of early admission to school for mentally advanced children and to assess the impact of this procedure on the community, school organization (especially the classes and teachers involved with these children), and children themselves.
Subjects: A group of preschool children surpassing a number of criteria levels (intellectual, social, emotional, and physical) selected in each of the three years of this study.
Methods: Initial selection procedures using Binet, Goodenough, Vineland Social Maturity Scale, rating scales and parent interview. Regular interviews with community leaders, teachers and parents for assessment of attitudes. Regular observations of children's behavior.
Findings: In the first year, the examinations of 246 preschool children, from 3-9 to 4-8 years of age, produced recommendations for early admission for 26 children. Parents withheld permission for 7 of these children to be admitted. The other 19 are distributed among the six kindergartens in Warren, Pennsylvania, and all have adjusted adequately or better to the group. The community to date has displayed a high level of interest in and cooperated with the project. Maximum publicity has been given--press, radio, TV, addresses to professional and parent organizations.
Duration: November 1961-October 1964.
Principal investigators: Jack W. Birch, Ph.D., Chairman, and W. David Barney, Ph.D., Visiting Research Professor, Department of Special Education and Rehabilitation, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating groups: Pennsylvania Department of Public Instruction; Warren Public Schools Board of Education; Office of Education, U. S. Department of Health, Education, and Welfare.

Achievement, aptitude, and school adjustment

16-O-1 PATTERNS OF ACHIEVEMENT AMONG COLLEGE-BOUND STUDENTS

Purpose: In order to establish a sounder basis for the development of improved instructional programs and guidance services for above-average students, this study will (1) attempt to determine the extent to which there are identificable patterns of achievement, such as among the college-bound; (2) analyze discernible patterns of achievement in relation to critical characteristics of students and schools.
Subjects: Some 1,500 seniors in 10 school districts.
Methods: Data for study will be collected from cumulative records. Longitudinal profile charts will provide the basis for visual determination of developmental patterns. Various tests of significance will be used in analyzing the constancy and variability of patterns at different grade levels and in identifying the predominant or distinctive patterns in different schools.
Principal investigators: Walter Reiner, Principal, Pearl River High School, Pearl River, and Charles M. Armstrong, Division of Research, New York State Education Department, Albany, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-O-2 ABOVE-AVERAGE INTELLIGENCE TEST SCORES AND SCHOOL ACHIEVEMENT

Purpose: To determine which I.Q. tests are most useful for identifying gifted children, assigning them to suitable educational programs, and predicting school achievement.
Subjects: 24 elementary and 24 high school students of above-average intelligence--as measured by the Lorge-Thorndike group intelligence test.
Methods: Students will be tested individually with both the WISC and Stanford-Binet (L-M) scales with an interval of two to three months between testings. To control the effects of practice and the time differential, the sequence of the tests will be reversed for half of the pupils. Total scores for each of the three tests (Lorge-Thorndike, WISC,

and Stanford-Binet), scores on subscales (e.g., WISC Verbal), and distributions of these scores will be compared, and their relationship to such variables as school achievement, grade, and sex will be determined utilizing Chi-square, t ratio, and analysis of variance.
Duration: Not reported-September 1965.
Principal investigator: Bert Friedman, Ph.D., School Psychologist, Ballston Spa Central Schools, Ballston Spa, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-0-3 IMPROVING THE ACHIEVEMENT OF BRIGHT UNDERACHIEVERS

Subjects: Bright underachievers in grades 4, 8, and 10.
Methods: This program, based on a pilot study of factors in underachievement (Bulletin 15, Research Relating to Children), will involve (1) identification of bright underachievers by a systematic survey using data processing techniques; (2) the conduct of inservice training classes for guidance counselors who will work with underachievers, their parents and teachers; (3) organization of counseling groups for underachievers and for their parents and teachers; and (4) evaluation of the success of group counseling and comparison of achievement of participants with that of control pupils outside the groups. Multiple regression will be used in isolating factors in underachievement and identifying immutable and amenable characteristics of underachievers.
Principal investigators: Byron B. Williams, Ph.D., Director, Office of Field Services, and John A. Schmitt, Ed.D., Research Consultant, College of Education, University of Rochester, Rochester 20, N. Y.
Cooperating group: Reserach Offices, New York State Education Department.

16-0-4 A STUDY OF SOME UNDERACHIEVERS IN PERSHING JUNIOR HIGH SCHOOL

Purpose: (1) To attempt to determine why pupils being studied are underachieving; (2) to determine whether the work with them is helpful; (3) to see if there are procedures which could be suggested for other cases; and (4) to explore means to help other teachers understand the problem of underachievement.
Subjects: Pupils whose I.Q.'s are 120 and above, and whose marks are comparatively low.
Duration: September 1962-June 1963.
Principal investigators: John A. Ratliff, Ed.D., Principal, and staff, Pershing Junior High School, 7000 Braes Blvd., Houston 25, Tex.

16-0-5 STUDY OF PERCEPTUAL AND BEHAVIORAL FACTORS HYPOTHESIZED AS RETARDING SCHOLASTIC ACHIEVEMENT

Purpose: To study the interrelationships between the learner's psychological and behavioral variables and the learning situation variables for high aptitude-low achievement fifth gaade students. General hypothesis: low achievers will differ significantly from high achievers in their perceptual motivational self-structures (psychological variables), classroom behavior and performance (behavioral variables), and the degree of compatibility (degree of convergence) of these with assigned learning tasks, teacher role and expectations, and media of instruction used.
Subjects: Phase 1: 15 high aptitude-low achievement fifth graders and 15 high aptitude-high achievement fifth graders. Phase 2: 60 to 80 high aptitude-low achievement fifth graders in six fifth grade classrooms and 60 to 80 high aptitude-high achievement fifth graders in six fifth grade classrooms.
Methods: Phase 1: through intensive testing, observing, and interviewing, identification of those variables which most significantly differentiate the high aptitude-low achievers from the high aptitude-high achievers. Phase 2: through differential feedback to experimental and control teachers, of information about high aptitude-low achieving pupils concerning variables deemed significant in Phase 1, assessment of differences in individual achievement of pupils as teachers plan school experiences in line with their self-structures.

Duration: October 1962-August 1963.
Principal investigators: Hugh V. Perkins, Ph.D., Professor, and Richard M. Brandt, Ed.D., Associate Professor, Institute for Child Study, University of Maryland, College Park, Md.

16-0-6 NONINTELLECTUAL CORRELATES OF ACADEMIC ACHIEVEMENT BETWEEN ACHIEVING AND NONACHIEVING SPANISH-AMERICAN SECONDARY SCHOOL CHILDREN

Purpose: To investigate personality, home, and other variables related to academic achievement.
Subjects: Groups of Spanish-American high school boys and girls, matched on I.Q., economic status, and academic class. Groups differed significantly (.01 level) in grade achievement.
Findings: Under- or nonachievers are more hostile, less able to handle anxiety, and cannot initiate and sustain positive work habits. Mothers differ in demands placed on offspring.
Publication references: Journal of Educational Psychology.
Duration: Spring 1961-completed.
Principal investigator: Lois Jean Gill (Ph.D. Candidate), Counselor, West Denver High School, Denver, Colo.

16-0-7 EFFECT OF PUPIL TRANSIENCY ON PUPIL ACHIEVEMENT

Purpose: To measure effect of pupil transiency on pupil achievement (skills, knowledges, attitudes, personality traits).
Subjects: Experimental (high turnover) schools--third and sixth grade (high, middle, low ability class); control (low turnover) schools--third and sixth grade (high, middle, low ability class).
Methods: Identification of schools showing high and low turnover--basic data gathered from 1,101 forms submitted by each elementary school during 1958-59 school year. Identification of characteristics of the transient population in schools with high and low turnover--code developed for recording cumulative data (record card, test card, health card). Analysis of relative pupil performance in schools with high and low turnover with analysis sheet for each child--atypical data recorded verbatim wherever available. Analysis of teacher and supervisor opinion concerning effect of high turnover.
Duration: September 1959-February 1963.
Publication plans: A final report will appear during 1963.
Principal investigator: Bureau of Educational Program Research and Statistics, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.

16-0-8 INFLUENCE OF CLASSROOM GROUP COHESIVENESS ON LEARNING AND ADHERENCE TO STANDARDS

Purpose: To investigate the influence of group cohesiveness on learning of specific content material and on adoption of standards relevant to the general pursuit of knowledge.
Subjects: Fourth and fifth graders.
Duration: August 1962-February 1964.
Principal investigators: Albert J. Lott, Ph.D., Associate Professor of Psychology, University of Kentucky, Lexington, and Bernice Lott, Ph.D., Professor of Psychology, Kentucky State College, Frankfort, Ky.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-0-9 YOUTH DEVELOPMENT THROUGH GROUP METHODS IN THE CLASSROOM

Purpose: To adapt and develop group methods applicable to the classroom, to train teachers in their use, to evaluate the effectiveness of such training, and to test its effectiveness on the prevention of maladjustment and delinquency among the pupils of these teachers.

Subjects: 60 sixth grade teachers from the Kansas City, Missouri, public schools and all of the children in their classrooms.
Methods: Subjects divided into two groups of 30 teachers each. Group A has already received three weeks' training in a workshop during the summer. During this school year, Group B serves as control. Both groups receive pre- and post-testing on the Minnesota Teacher Attitude Inventory, Firo-B, Rokeach Scale, and a content test. Each teacher will also be observed in classroom regularly during the school year using adaptation of the Flanders Interaction Categories, Oscar Instrument, and unstructured observations. Next year, Group B will receive training and be observed again. At the end of four years, the children in all of these rooms will be assessed in a follow-up study for adjustment and delinquency.
Duration: January 1962-January 1966.
Principal investigator: Paul H. Bowman, Ph.D., Department of Prevention, Psychiatric Receiving Center, Greater Kansas City Mental Health Foundation, 2200 McCoy, Kansas City, Mo.
Cooperating groups: Kansas City Public School System; University of Missouri; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-0-10 CLASSROOM INTERACTION, PUPIL ACHIEVEMENT AND ADJUSTMENT IN TEAM TEACHING AS COMPARED WITH THE SELF-CONTAINED CLASSROOM

Purpose: To determine whether multi-grade team teaching classroom organization makes a difference in pupil achievement, adjustment or classroom interaction when compared to classes taught in a traditional self-contained classroom.
Subjects: 525 elementary school pupils--350 pupils in grades one to six at Washington School and 175 pupils in grades one to six at Longfellow School. In the Washington School, there are two sections at each grade level with about 30 pupils per class. Experimental design will separate the pupil population, grade by grade, into an experimental group and control Group A, with children assigned to one group by use of a table of random numbers. Control Group B will be made up of the pupils at Longfellow School.
Methods: All groups will be stimulated by University consultants and the introduction of new teaching aids in an attempt to counteract the Hawthorne effect. Control Group B will be used to evaluate possible contamination of variables between the experimental group and control Group A at Washington School. Great care will be taken to introduce bias in the selection of staff for this study. Only strong advocates of a multi-grade team teaching organization and a self-contained classroom organization, who are highly skilled teachers, will be employed. Achievement tests, pupil adjustment tests, and interaction analysis will be made. Appropriate statistical analysis will be made of the data to determine any significant differences between the two types of classroom organization.
Duration: 1960-1963.
Principal investigator: Philip Lambert, Ph.D., Professor, School of Education, University of Wisconsin, Madison 6, Wis.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-0-11 APPRAISAL OF TEAM TEACHING IN ELEMENTARY SCHOOLS

Purpose: To determine effects of team teaching and (1) quantity and quality of children's learning; (2) teacher competence and effectiveness; (3) recruitment and retention of teachers; and (4) home-school-community relationships.
Subjects: Six schools, representing all boroughs except Richmond and a variety of socio-economic backgrounds. In each school, three to seven classes, grades three, four, or five.
Methods: Planning with the schools to set up such teams as will best utilize the specific talents of their teachers. The project coordinator from the Elementary Division will cooperate with principals and other supervisors in assisting teachers, solving problems, evaluating on-going programs. During 1962-63, the projects will consist of tryout rather than controlled experimentation. The design for formal evaluation will be formulated at a later date.
Duration: November 1961-indefinite.
Principal investigators: Catherine Urell, Ph.D., Research Associate, Bureau of Educational Research, and Helene M. Lloyd, Assistant Superintendent, Elementary School Division, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.

Cooperating groups: Elementary School Division; Bureaus of Educational Research, Curriculum Research, and Educational Program Research and Statistics; Audio-Visual Instruction; New York City Board of Education.

16-0-12 AN INTEGRATIVE APPROACH TO CLASSROOM LEARNING

Purpose: Contemporary education is experiencing conflict between opposing forces--emphasizing teaching "fundamentals" versus "the whole child" approach. However, both educational and personality theory predict that there is a constellation of classroom conditions which will foster both intellectual and social-emotional growth. This global hypothesis will be tested by measuring a number of dimensions through two standardized procedures.
Subjects: Pupils in 40 to 60 elementary classrooms.
Methods: Pupil measures (selected to reflect mental health) of creativity, reading, arithmetic, anxiety or dependence-proneness, attitude, motivation, and group skills will be taken, and the means correlated with the classroom measures. The correlation matrix will then be factor analized. Both classroom and pupil measures will be taken a second [illegible] - so that more subtle aspects of pupil growth can be tested by analysis of variance, using categories of classroom conditions as treatments. Teacher personality and pupil personality will also be studied in relation to teacher-pupil behavior and pupil change. A training experience designed to promote self-insight, sensitivity and skill in working with others will be offered to a subgroup of teachers during the intervening summer and change will be assessed by factor scores derived from the earlier analysis.
Duration: July 1962-June 1966.
Principal investigator: Robert S. Soar, Ph.D., Associate Professor, School of Education, University of South Carolina, Columbia, S. C.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-0-13 EVALUATION OF THE EARLY IDENTIFICATION AND PREVENTION PROGRAM

Purpose: To determine the impact of the experimental program in pupil development and teacher growth.
Subjects: Beginning second grade pupils with behavioral and learning problems.
Methods: Experimental and control groups will be measured, rated, and observed. The matched pair technique and/or analysis of variance method will be used to treat the data. In order to gather objective evidence about the effectiveness of the experimental program, a pilot evaluation was begun in the fall of 1961. Initial and final tests of reading and arithmetic achievement were administered to about 750 children in the second grade. Screening forms for behavioral and learning problems were distributed to three experimental and two control schools. Special questionnaires were constructed and distributed to participating principals and teachers to secure their reaction to the program.
Duration: September 1961-1963.
Principal investigators: George Forlano, Ph.D., Acting Assistant Director, and Julia A. Martin, M.S., Assistant in Research, Bureau of Educational Research, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.
Cooperating group: Division of Child Welfare (Bureaus of Child Guidance and of Educational and Vocational Guidance) and Elementary School Division, New York City Board of Education.

16-0-14 THE DEVELOPMENTAL BASIS OF LEARNING DISABILITY

Purpose: To examine a series of hypotheses concerning the physical substratum of classroom learning difficulties.
Subjects: 200 fourth graders chosen from a pool of 1,200 by individual scrutiny.
Methods: Longitudinal; inferential.
Duration: 1961-1963.

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Principal investigator: Thomas E. Jordan, Ed.D., Director, Center for Teacher Education, Tulane University, New Orleans 18, La.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-0-15 COOPERATIVE GUIDANCE STUDY

Purpose: An experimental study of the effectiveness of early identification and guidance of children with learning problems in the prevention or remediation of major adjustment and learning problems.
Subjects: 1,078 fourth grade children in 11 public school systems in West Central Wisconsin were tested. Of these, approximately 180 students were identified as underachievers, a term used here to describe a child whose achievement level on the Iowa Test of Basic Skills was conspicuously below a predicted level of attainment as indicated by the Wechsler Intelligence Scale for Children.
Methods: Subjects identified as underachievers have been divided into experimental and control groups. The control group will not be formally guided at any time and will receive only those services normally administered by the local schools. The experimental group of underachievers is receiving intensive diagnostic study and guidance from the research team during their fourth, fifth, and sixth grade years. Follow-up will continue through high school graduation.
Duration: Fall 1961-June 1970.
Principal investigators: John C. Cleveland, M.S., Assistant Professor, and Robert M. Jackson, Ph.D., Associate Professor, Department of Psychology, Wisconsin State College, La Crosse, Wis.
Cooperating group: Research Advisory Council, Wisconsin State College.

16-0-16 INDICATORS OF MALADJUSTMENT IN JUNIOR HIGH SCHOOL BOYS

Purpose: To relate measures of maladjustment and aggressiveness in preadolescent males. Secondary purpose, to determine agreement between teachers' classifications of students' aggressiveness and the questionnaire responses of students.
Subjects: 117 boys in sixth, seventh, and eighth grades of a public school in a small Southern city.
Methods: Instruments administered to small groups of students: Buss Hostility Scale (inventory measuring aggressiveness in various areas); bipolar ratings of 20 personality characteristics (subjects rating themselves as they are and as they would like to be. A self-ideal discrepancy score, as a measure of dissatisfaction with present self-concept derived from the self-rating); modified form of Philosophy of Human Nature Scale, (Likert-type scale dealing with positive and negative aspects of human nature). Teachers were asked to classify each boy as Aggressive-Bad (e.g., disruptive, unruly, etc.), Aggressive-Good (active, leading, etc.), or Passive (quiet, unassertive, etc.).
Findings: No significant differences between grades were found. Across and within grades, significant relationships were found between conceptually different measures of maladjustment. Teachers' classifications of students' aggressiveness were found to be related to self-ideal discrepancies and negative views of human nature.
Duration: September 1961-March 1962.
Principal investigators: Walter Collins, Ph.D. Candidate, and Lawrence S. Wrightsman, Jr., Ph.D., Assistant Professor of Psychology, George Peabody College for Teachers, Nashville 5, Tenn.
Cooperating group: Fellowship grant from National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-0-17 A FOLLOW-UP STUDY OF CHILDREN REFERRED TO COUNSELING SERVICE BECAUSE OF AGGRESSIVE, ACTING-OUT BEHAVIOR IN KINDERGARTEN, FIRST, SECOND, AND THIRD GRADES DURING ACADEMIC YEARS 1956-1957, 1957-1958, and 1958-1959

Purpose: This is the fourth in a series of follow-up studies requested by the School Social Work Department of the Tacoma Public Schools. Its purpose is to describe children referred for aggressive, acting-out behavior at two different points in time to provide a better understanding of the possible causes and manifestations of such behavior, and the possible means of resolving this problem.
Subjects: 35 children in Tacoma public elementary schools who had earlier been referred to the Social Service Department of the Tacoma Public Schools with aggressive, acting-out behavior (as assessed by the teacher and/or the school social worker) as the chief referring problem. Subjects, or their parents, had subsequently received at least one face-to-face interview with the school social worker, and their cases had been closed since January 1, 1960.
Methods: Two schedules were designed for data collection--one for recorded information in social case records and school records, the other for a structured interview with the teacher, with factors from the first schedule included wherever practical.
Findings: Partial findings: (1) More males than females were referred, at a ratio of four to one; (2) a majority of subjects were of normal or above average intelligence; (3) a large segment of the sample consisted of children who were the oldest in their families or who were only children; (4) subjects came, for the most part, from families which displayed problems in two or more of the five areas used to measure general family security. Problems in the economic area were found to have less significance than those of a more psychological nature.
Principal investigator: Grace D. Reiss, M.A., Associate Professor, Graduate School of Social Work, University of Washington, Seattle 5, Wash.
Cooperating group: Tacoma Public Schools.

16-0-18 A GROUP COUNSELING PROGRAM FOR ACTING-OUT PREADOLESCENTS

Purpose: To evaluate the efficacy of group counseling for a group of acting-out preadolescents in junior high school setting.
Subjects: 15 junior high school students--10 boys and 5 girls.
Methods: Acting-out youngsters were identified by teachers and then screened for placement in a special guidance program (group counseling) by a committee of counselors and the school psychologist. Daily counseling sessions were held with an open group. Evaluation of progress was assessed by pre- and post-administration of the semantic differential. Teacher rating scales were also used in evaluation. Statistical techniques included the D statistic and Chi-square.
Findings: Results point overwhelmingly to the success of the approach. Highly significant findings were indicated in four semantic differential concepts. Teacher ratings were significant in 7 of 12 areas.
Publication plans: Will be submitted to California Journal of Education Research.
Duration: September 1958-June 1962.
Principal investigator: Allen P. Webb, Ph.D., Psychologist, Pasadena City Schools, 351 S. Hudson, Pasadena, Calif.

16-0-19 RELATIONSHIP BETWEEN CHRONIC TRUANCY AND EARLY SCHOOL PHOBIA

Purpose: To determine if there is a relationship between chronic truancy and a history of an earlier school phobia; to compare the characteristics of those chronic truants who have a history of an earlier school phobia with those who do not; to evaluate any treatment given to the children with school phobia.
Subjects: 28 children who were seen by the Institute for Juvenile Research in Chicago, Illinois, and who were checked as being "chronic truants".
Methods: Thorough review of case histories of "chronic truants," attempting to determine if any had been school phobic children prior to becoming chronic truants. Data recorded verbatim and systematically on schedules.

Findings: Of the 28 chronic truants, 14 were found to have had a history of an earlier school phobia. Only 4 of the 14 had been treated. In nearly all respects, there were no differences between the chronic truants who had a history of an earlier school phobia and those who did not.
Publication plans: Plan to submit articles to Mental Hygiene, Child Welfare, and Social Casework.
Duration: September 1962-January 1963.
Principal investigators: Harry E. Grob, Jr., M.S.W., Assistant Superintendent, and R. Don Harvey, M.S.W., Social Worker, Chaddock Boys School, Quincy, Ill.
Cooperating group: Institute for Juvenile Research.

16-0-20 DISTRIBUTION AND CHARACTERISTICS OF SCHOOL DROPOUTS IN MANHATTAN

Purpose: To determine the incidence, distribution, and characteristics of school dropouts from the borough of Manhattan.
Subjects: A 25 percent sample, randomly selected, of all dropouts from Manhattan schools during the fiscal year 1960-61.
Methods: The characteristics of these dropouts will be obtained from school records, characteristics of residence from census tract data, characteristics of employment efforts obtained from New York State Employment Service. A sample of the panel of dropouts will be interviewed to determine long- and short-term aspirations, feelings of deprivation, value systems, adherence to delinquent subcultures and attitudes to the world of work. These interviews will be tape-recorded and will be of a semistructured, open-ended funnel type.
Publication plans: To be published in May 1963.
Duration: February 1962-February 1963.
Principal investigator: Arthur Pearl, Ph.D., Director of Research, New York State Division for Youth, 155 Washington Ave., Albany 10, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: New York City Board of Education; New York State Employment Service.

16-0-21 AN EVALUATION OF A VOCATIONAL ADVISORY SERVICE PROGRAM FOR SCHOOL DROPOUTS

Purpose: To evaluate the effectiveness of a special Experimental Vocational Advisory Service Program for school dropouts developed by the Vocational Advisory Service in conjunction with the State Division for Youth and the State Employment Service.
Subjects: A random sample of all 16 and 17 year old school dropouts will be referred to the Vocational Advisory Service special program and designated as experimentals. The controls will be treated by the State Employment Service in their normal procedures.
Methods: Experimental and control cases will be categorized as to values, work history, personal maturity and aspiration. There will be a careful process recording of the VAS experience and a follow-up longitudinally for a period of five years to determine the relative ability of the experimental cases to obtain, sustain, and advance in jobs when compared with control cases, determining if the effects are short-lived or have long-term value. It will be a function of the research to ascertain the category of youngsters who are best serviced by this program.
Duration: March 1962-March 1967.
Principal investigator: Arthur Pearl, Ph.D., Director of Research, New York State Division for Youth, 155 Washington, Ave., Albany 10, N. Y. (Reported in Current Projects in the Prevention, Control and Treatment of Crime and Delinquency, 1962.)
Cooperating groups: New York State Employment Service; Vocational Advisory Service.

Specific skills

16-P-1 THE RELATIONSHIP BETWEEN BIRTH ORDER AND READING ABILITY IN A GROUP OF THIRD GRADE SCHOOL CHILDREN

Purpose: To investigate relationship between certain sibling group structural characteristics (birth order, size of sibling group, spacing of siblings, sex composition of sibling group) and reading ability (both disability and superior ability) controlling for I.Q., socio-economic status, and sex.
Subjects: 816 third grade boys and girls who are not twins and are from families containing no step- or half-brothers or sisters.
Methods: Multi-variate analysis of data.
Findings: I.Q., socio-economic status, sex strongly related to reading ability. Birth order, size of sibling group, maternal employment related to reading ability but not spacing or sex composition of sibling group.
Publication plans: Plan to publish as Ph.D. dissertation.
Duration: 1960-1962.
Principal investigator: Perry Levinson, (Ph.D. Candidate), Social Science Analyst, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Adelphi Plaza, Adelphi, Md.
Cooperating groups: Prince Georges County Board of Education; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-P-2 READING ACHIEVEMENT AND SUBSEQUENT OUTCOME: A POPULATION STUDY

Purpose: To apply epidemiological and sociological methods to the longitudinal study of various reading levels (retarded, at grade, and advanced) to determine the subsequent outcome. This is a continuation of the study "Epidemiology of Reading Disability" begun by Miller, Margolin, and Yolles (Bulletin 4, Research Relating to Children).
Subjects: All the students in a Maryland county public school system enrolled in regular sixth grade classes in 1954-55.
Methods: Longitudinal: subjects followed until they graduated form high school or left the school system. Reading levels were associated with later academic and social achievement. Epidemiological: a population was used as the comparison base to determine incidence and prevalence rates for various reading levels and conditions (such as dropouts) at various points in the school career. Sociological: the geographical area was divided into social areas (such as school districts); demographic characteristics (age, sex, socio-economic status, etc.) were related to achievement.
Publication references: American Journal of Public Health 47:1250-1256, October 1957; chapter in J. Money, Reading Disability: Progress and Research Needs in Dyslexia, Johns Hopkins Press, 1962.
Principal investigator: J. R. Newbrough, Ph.D., Scientist, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Adelphi Plaza, Adelphi, Md.

16-P-3 THE EFFECT OF IMPROVEMENT IN READING UPON OTHER SCHOOL SUBJECTS

Purpose: To determine the effect of improvement in reading skills upon other school subjects. It was desirable to note what specific school subjects were involved and whether statistically significant gains were made.
Subjects: 80 subjects in fifth and sixth grades--40 subjects were enrolled in remedial reading groups for an entire year; 40 subjects constituted the controls. Subjects were matched by sex, grade, and teacher to minimize bias.
Methods: The remedial reading groups received one hour per week additional training for one school year of nine months. The remedial reading teacher conducted all of the training. Results were analyzed by an analysis of covariance to determine significance.

Findings: All school subjects that depended primarily upon reading ability made some gains. At least one experimental group made significant gains in each. The remedial groups consistently outgained the control significantly in study skills evaluation. Arthmetic was the only school subject which was apparently immune to improved reading skills. Overall improvement was shown in the Battery Median gains for the remedial groups. Sixth grade made a greater number of gains than fifth grade. Girls made more significant gains than boys in a ratio of four to one.
Publication plans: To be submitted to professional psychology, education, or reading journal. If not published, no conditions will be imposed on making the data available.
Duration: September 1961-November 1962.
Principal investigator: Leon D. Radaker, Ed.D., School Psychologist and Director of Research, Butler Area Schools, Box 791, Butler, Pa.

16-P-4 VALUE OF READING INSTRUCTION TO SELECTED KINDERGARTENERS

Purpose: A formula for the prediction of reading success will be devised on the basis of a multiple regression analysis of data on the physiological, intellectual, and emotional development and the socio-economic background of third grade pupils. The formula will be used for prediction of reading success of entering kindergarteners.
Subjects: 36 kindergarteners.
Methods: Experimental group will be given reading instruction 30 minutes a day for eight months, October through June. At the end of the year, reading test scores will be compared with predicted achievement. Results of this analysis, along with data from behavior rating scales and vision tests, will be used to determine: (1) if it is possible to predict accurately which five year olds will profit from reading instruction; (2) how much progress can be made in reading in kindergarten; and (3) if there are any ill effects from reading instruction in kindergarten. In subsequent years, the reading achievement of the experimental group will be compared with that of control group who did not have the early reading instruction. The reading progress of the third grade pupils providing data for the prediction formula will also be followed; new kindergarten reading groups will be started.
Duration: 1962-1965.
Principal investigators: Florence Heisler, Ph.D., and Dr. Louis M. Heil, Director, Office of Testing and Research, Brooklyn College, City University of New York, Brooklyn 10, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-P-5 THE SHORT-TERM READING READINESS NURSERY: A SOCIAL INTERVENTION TECHNIQUE

Purpose: To determine whether reading-readiness skills can be improved by a 13-week nursery experience; to test hypothesis that inability to respond to verbal instructions is part of a general deficiency in ability to adopt a learning set for nonverbal descrimination; and to better understand relationship between child-rearing techniques and nursery school adjustment.
Subjects: Children averaging 4-4 years of age from father-absent Negro families receiving Aid to Dependent Children.
Methods: A standard enriched, somewhat controlling, nursery routine is augmented by intelligence testing, Piaget-type inquiries into the theories of causality, child-socialization interviews with the mothers, and Q-sort studies of the mothers' conceptions of their children and of themselves in the role of woman, mother, and potential wage-earner.
Publication plans: Periodic multilithed reports will be available.
Duration: June 1962-1966.
Principal investigator: Fred L. Strodtbeck, Ph.D., Associate Professor of Sociology and Psychology, University of Chicago, Chicago 37, Ill.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-P-6 A STUDY OF UNDERPRIVILEGED PRIMARY CHILDREN

Purpose: To test the values of summer school between kindergarten and first grade as preparation for reading for children from underprivileged neighborhoods.
Subjects: 60 kindergarten children scoring stanine 3 or lower on Metropolitan Reading Readiness Test, matched for sex, M.A. (Goodenough Draw-a-Man), C.A., and school. 30 attended summer school, 30 did not.
Methods: Individual Binet tests will be administered to both experimentals and controls. Reading tests at the end of the year will serve to measure value of summer school supplementary preparation for reading.
Duration: June 1962-June 1963.
Principal investigator: Vera V. Miller, M.A., Director of Research and Testing, Community Consolidated Schools, 1314 Ridge Ave., Evanston, Ill.

16-P-7 A STUDY OF THE RELATIONSHIPS BETWEEN ANTISOCIAL BEHAVIOR AND READING DEFICIENCY IN YOUNG ADOLESCENTS

Subjects: All students in the seventh, eighth, and ninth grades (junior high school) who are retarded in reading ability and have demonstrated antisocial behavior--total of 78, plus approximately 40 others (for purposes of diffusion). Selection based on Reading and Vocabulary sections of Iowa Test of Basic Skills, California Test of Personality, Lipsitt and Castaneda Self-Concept Scale, and behavior ratings by former teachers and deans.
Methods: One-half of the group, randomly selected, was enrolled in a special developmental reading class, taught by a specialist; the other half (control group) enrolled in regular classes. At the end of the school year, pupils were again evaluated by the same tests, and gains in reading and social adjustment were statistically and descriptively analyzed and interpreted.
Publication references and plans: Published as a dissertation available in University of Southern California library; articles will be submitted to *Journal of Educational Research*, etc.
Duration: August 1960-August 1961.
Principal investigator: Edward B. Wells, D.Ed. Candidate, School of Education, University of Southern California, Los Angeles 7, Calif. (Reported in *Current Projects in the Prevention, Control and Treatment of Crime and Delinquency*, 1962.)
Cooperating groups: Los Angeles County Probation Department; Santa Monica School District; Youth Studies Center, University of Southern California; Ford Foundation.

16-P-8 HOLDOVERS IN THE ELEMENTARY SCHOOL, WITH SPECIAL REFERENCE TO READING

Purpose: To explore differences in reading progress of pupils in grades one through six after retention in grade. Subproblems: (1) analysis of factors associated with retained pupils; (2) analysis of factors of administrative provision for retained pupils; and (3) analysis of growth in reading achievement of retained pupils.
Subjects: 100 pupils in each grade, selected from all school districts. Two boys and two girls on each grade level in each district.
Methods: Interview, checklist, test administration.
Duration: November 1960-December 1962.
Principal investigator: Bureau of Educational Program Research and Statistics, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.
Cooperating group: Elementary School Division, New York City Board of Education.

16-P-9 THE HANDWRITING ABILITIES OF LEFT-HANDED INTERMEDIATE GRADE PUPILS

Purpose: To compare the quality of handwriting of these pupils with their right-handed classmates.

Subjects: 500 left-handed children; 500 right-handed children (selected at random).
Methods: Use the Ayres' Measuring Scale for Handwriting to determine quality. Four judges used.
Publication plans: Journal of Educational Research or Journal of Educational Psychology.
Duration: Fall 1961-fall 1962.
Principal investigator: Patrick J. Groff, Ed.D., Associate Professor of Education, San Diego State College, San Diego, Calif.
Cooperating group: San Diego State College Foundation.

16-P-10 DETERMINATION OF "STRUCTURE-OF-INTELLECT" ABILITIES INVOLVED IN NINTH GRADE ALGEBRA AND GENERAL MATHEMATICS

Purpose: Several investigators have identified factors in mathematical ability. Many of these can be defined more precisely in terms of the structure-of-intellect model. Symbolic content seems important; evaluative abilities not previously measured will be explored, with the following major objectives: (1) to identify intellectual factors necessary for successful algebraic thinking; (2) to discover whether the factor structure for algebraic ability differs from that of ninth grade general mathematics; (3) to discover whether appropriate structure-of-intellect tests will serve as predictors of success in ninth grade algebra; (4) to discover possibility of eliminating the "false positives" and "false negatives" with reference to the assignment of students to algebra versus general mathematics; (5) to explore possibility of early selection of talented students for special attention in mathematics.
Methods: A battery of factor tests will be administered to students in algebra and general mathematics courses in two sections, one to be administered early in the fall semester 1961, and the other early in the spring semester 1962. Criterion tests covering the usual content of these courses will be given at the end of fall and spring semesters. Factor analyses will be made to compare factor structure of boys with that of girls and the structure of algebra students with that of general mathematics students. Composite factor scores will be derived and used in a multiple-regression procedure to predict course grades and scores on criterion tests. Profiles of students especially able in algebra will be investigated.
Duration: August 1961-August 1963.
Principal investigators: J. P. Guilford, Ph.D., Professor of Psychology, and Philip R. Merrifield, Ph.D., Adjunct Assistant Professor of Psychology, University of Southern California, Los Angeles 7, Calif.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-P-11 SCIENCE CONCEPT DEVELOPMENT IN THE ELEMENTARY SCHOOL THROUGH INQUIRY TRAINING

Purpose: Further development of inquiry training methods and the determination of transfer effect to the inquiry process in various disciplines.
Subjects: 60 or more sixth grade pupils in an Urbana school.
Methods: Covariance analysis as statistical control in experiment involving three experimental and one control group of randomly assigned sixth graders.
Findings: None yet in present project. Findings of previous study (Bulletin 10, Research Relating to Children) indicate inquiry training makes children more analytical and productive in inquiry within area of physics.
Publication references: Final report from earlier project available in multilith.
Duration: September 1962-August 1964.
Principal investigator: J. Richard Suchman, Ph.D., Associate Professor of Education, University of Illinois, Urbana, Ill.
Cooperating groups: University Research Board; Cooperative Research Program, Office of Education, U. S. Department of Health, Education, and Welfare.

Special education

16-Q-1 SUPPLEMENTARY TRAINING METHODS TO IMPROVE WORD RECOGNITION DEVELOPMENT OF RETARDED READERS WITH NORMAL MENTALITY

Purpose: To evaluate the most effective methods to increase the visual cues enabling reading casualities to recognize and discriminate words more efficiently. It was hypothesized that training in imagery visualization or a combination of methods that include imagery visualization would produce the most significant results.
Subjects: 160 subjects in grades three, four, five, and six enrolled in public school remedial reading groups, with normal mentality and retarded in reading ability a minimum of 15 percent below grade equivalents as measured by the Stanford Achievement Tests. By random selection, 20 subjects were assigned to each of eight experimental conditions.
Methods: Training was provided in small groups for 15 minutes per week for four months in imagery visualization (IV), symbol discrimination (SD), and word discrimination (WD). Experimental groups constituted were: IV; SD; WD; IV-SD; IV-WD; SD-WD; and IV-SD-WD; and control. Results were statistically analyzed by an analysis of covariance to determine statistical significance.
Findings: Applicable only to reading casualties in third, fourth, fifth, and sixth grades: a higher percentage of boys reported no measurable visual images; through training procedures, boys make greater gains in the quality of the images; vocabulary development is the best single indicator of predictable academic achievement; the most significant results were obtained from a combination of training in imagery visualization and word discrimination.
Publication plans: To be submitted to professional psychology, education, or reading journals. If not published, no conditions will be attached to making the data available.
Duration: January 1961-October 1962.
Principal investigator: Leon D. Radaker, Ed.D., School Psychologist and Director of Research, Butler Area Schools, Box 791, Butler, Pa.

16-Q-2 AN EDUCATIONAL PROGRAM FOR CULTURALLY DEPRIVED KINDERGARTEN CHILDREN

Purpose: To introduce into kindergarten experiences a program specifically designed to meet the needs of culturally deprived children.
Subjects: Kindergarten children from Racine, Wisconsin, school system.
Methods: Experimental group: pre-tests, curriculum treatment, post-tests. Control group: pre-tests, no treatment, post-tests. Follow-up through first grade.
Publication plans: Appropriate journal.
Duration: September 1962-June 1964.
Principal investigators: Richard Larson, M.A., Principal, Stephen Bull School, Racine, Wis. and James L. Olson, Ed.D., Assistant Professor of Exceptional Education, University of Wisconsin, Milwaukee, Wis.
Cooperating groups: Racine School System; Johnson Foundation; Western Foundation.

16-Q-3 AN INDEPENDENT HONORS PROGRAM FOR THE ACADEMICALLY TALENTED

Purpose: Hypotheses to be tested concern the usefulness of personality and special intellectual measures in the prediction of success in an independent honors program and the positive influence of independent honors work on special intellectual characteristics.
Subjects: Pilot year, 10 gifted high school students--8 seniors and 2 juniors; second year, 40 juniors.
Methods: During pilot year, students worked independently on projects of their own choosing one school period per day; topics ranged from the personality of the American demagogue to paper chromatography. This year, the experimental group will spend the equivalent of one day per week on their independent projects. Evaluative instruments will include Getzel and Jackson's Tests of Creativity and Intelligence, Cattell's Objective-Analytic Personality Test Battery, the Brown-Holtman Survey of Study Habits and Attitudes, the Watson-Glaser Critical Thinking Appraisal, the ETS Guidance Testing Battery, the Minnesota Counseling Inventory, and the ETS Biographical Inventory.

Duration: 1962-1963.
Principal investigators: Charles Sansone, Chairman, Social Studies Department, Fox Lane School, S. Bedford Rd., Bedford, N. Y., and Francis G. Cornell, Ph.D., President, Educational Research Services, Inc., 124 East 40th St., New York 16, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-Q-4 INDEPENDENT STUDY SEMINAR EVALUATION AT ELEMENTARY LEVEL

Purpose: An attempt will be made to determine whether, or to what extent, the special conditions of the program and the differences, if any, between talented and creative children influence the process of problem solving.
Subjects: 50 fifth and sixth grade children identified in the first year of this experimental program as talented and/or creative.
Methods: Children will participate in a special "outside-school-hours" program of independent study and seminar evaluation, working with the guidance of graduate interns from Teachers College, Columbia University. Evaluation will utilize an adaptation of Rimoldi's technique for the study of performance in a problem-solving situation.
Duration: 1962-1963.
Principal investigators: Dr. Daniel F. Stevens, Principal, Oyster Bay Elementary School, East Main St., Oyster Bay, N. Y., and Miriam Goldberg, Ph.D., Assistant Professor, Teachers College, Columbia University, New York, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-Q-5 MEETING NEEDS OF GIFTED: A NONSTRUCTURED SUMMER PROGRAM

Subjects: Experimental group of 50 gifted children (I.Q. 130 or above) entering fifth and sixth grade; control group of 50 children matched on age, sex, grade, I.Q., achievement, and socio-economic status.
Methods: Subjects will take part in a summer program designed to increase problem-solving ability and to meet operant needs. Each child will have maximum freedom to explore areas of interest in science and the language arts through independent study and individual research projects. Comparison of experimental and control groups. Changes in problem-solving ability will be measured by score differences on STEP tests in science and language arts given before and after the summer program. Shifts in the levels of operant needs (e.g., affiliation, dominance, stimulation, deference) will be measured by pre- and post-selection factors used (age, sex, intelligence, reading comprehension, arithmetic reasoning) and success in the summer program as measured by the STEP tests will also be studied. The statistical analysis will include t tests and product moment and point biserial correlation coefficients.
Principal investigator: Carl M. Winston, Ph.D., Research Chairman, Plainview-Old Bethpage Public Schools, Plainview, N. Y.
Cooperating group: Research Offices, New York State Education Department.

16-Q-6 PROGRAMMED INSTRUCTION AS A DEVICE FOR THE CORRECTION OF WRITTEN LANGUAGE IN ADOLESCENT DEAF CHILDREN

Purpose: (1) To analyze the written language of deaf adolescents and its effect upon communication; (2) to determine effect of conditioning in correction of these errors; and (3) to determine relative effect of induction versus deduction on the learning process.
Subjects: 300 deaf adolescents attending eight residential and day schools for the deaf.
Methods: Ten linear programs have been prepared to cover 10 most frequent grammatical errors. These each have two forms--inductive and deductive. One-half of experimental group will be presented each form. Programs will be presented when an error covered by a given program is observed. Experimental group I will be given each program once, over a five-week period. Experimental group II will be given programs repeatedly, over a six-month period, when the error is noted to take place. A control group will indicate normal gains over the six-month period.

Findings: Results of the initial analysis of errors indicates that 10 discrete grammatical errors account for 82 percent of total errors. Attempt to modify errors through programmed instruction is currently in the experimental phase.
Publication plans: American Annals of the Deaf; Exceptional Children.
Duration: July 1962-July 1963.
Principal investigators: Jack W. Birch, Ph.D., Chairman, Department of Special Education and Rehabilitation, and E. R. Stuckless, M.S., Instructor, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-Q-7 EVALUATION OF HIGH SCHOOL MATHEMATICS PROGRAMMED TEXTS AS USED WITH DEAF STUDENTS

Purpose: To compare the relative effectiveness with deaf students of programmed texts with the "conventional" lecture in high school mathematics. To determine the relative achievement gained from the use of programmed texts of high school mathematics and to relate that achievement with English language ability and emotional dependence.
Methods: Based upon initial measurements of achievement in mathematics, students will be grouped on three levels: low, middle, and high. Each level will further be split into two classes matched on both initial achievement and English reading comprehension. A different instructor will be assigned to teach each level. He will use the usual lecture method with one class and the programmed texts with the matched class. Two-way analyses of variance will be used to test significance of differences between experimental and control groups. Correlational analyses will also be carried out with such predictor variables as reading comprehension, emotional dependence, and student opinions about the use of the programmed text. Criterion variables will be estimates of "true" achievement and time required to finish the program. Multiple regression estimates will be obtained where possible.
Duration: April 1962-March 1964.
Principal investigator: Harry Bornstein, Ph.D., Research Professor of Psychology, Gallaudet College, 7th and Florida Ave., N.E., Washington 2, D. C.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-Q-8 A PROGRAMMED READING METHOD FOR MENTALLY HANDICAPPED CHILDREN

Purpose: To test a programmatic method of teaching reading skills to mentally retarded children.
Subjects: Randomized samples of retarded children in public school classes.
Methods: (1) Development of programmed materials to provide a reading program to children using Progressive Choice Reading Method; and a programmed presentation of the Progressive Choice Method for teachers; (2) development of special reading test suited for evaluating zero skill and low skill readers (Progressive Choice Marginal Diagnostic Reading Test); and (3) randomized samples of subjects in experimental and control groups, pre- and post-tested at beginning and end of year.
Publication references and plans: American Journal of Mental Deficiency 67:274-280, September 1962. Articles in journals and Institute of Educational Research monograph.
Duration: May 1962-April 1965.
Principal investigator: Myron Woolman, Ph.D., Director, Institute of Educational Research, Inc., 2226 Wisconsin Ave., N.W., Washington 7, D. C.
Cooperating groups: Baltimore City School System; Fairfax County Schools; Jewish Foundation for Retarded Children, Inc.; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-Q-9 EVALUATION OF THE PROGRAM FOR THE BRAIN-INJURED CHILD

Purpose: To evaluate various aspects of the program for the brain-injured child and, insofar as possible, make some assessment of the children's growth.

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Subjects: Children with mild neurological handicaps, and with learning and adjustment problems, enrolled in special classes for brain-injured children.
Methods: Observation of the classes (behavior of children, class programs, etc.); administration of achievement tests in reading and mathematical concepts to assess pupil behavior in a test situation (frustration level, attention span, etc.) and growth in reading and mathematical concepts. Structured interviews with teachers, supervisors and other personnel. Follow-up of children discharged from the program.
Publication references: Interim report in 1959.
Duration: 1958-fall 1962.
Principal investigator: Sue Moskowitz, M.A., Bureau of Educational Research, New York City Board of Education, 110 Livingston St., Brooklyn 1, N. Y.
Cooperating group: Bureau for the Physically Handicapped, Division of Child Welfare, New York City Board of Education.

16-Q-10 PILOT STUDY TO DETERMINE THE RESULTS OF APPLYING THE MONTESSORI METHOD OF TEACHING TO HANDICAPPED CHILDREN

Purpose: To compare the Montessori method with the orthodox method.
Subjects: Children with brain damage, aged three to seven years.
Methods: Application of Montessori method.
Publication plans: No publication as yet; probably preliminary report will be available in July 1963.
Duration: September 1962-June 1965.
Principal investigators: William P. Argy, M.D., Medical Director, Peggy S. Misback, M.A., Coordinator, Sibyl K. Devereux, A.B., Teacher, and Constance Corbett, A.B., Teacher, District of Columbia Society for Crippled Children, 2800 13th St., N.W., Washington 9, D. C.

16-Q-11 A WORK SKILLS EDUCATION AND PLACEMENT PROGRAM FOR HANDICAPPED YOUTHS, TOGETHER WITH AN EVALUATION OF FACTORS RELATING TO VOCATIONAL SUCCESS

Purpose: Through cooperative efforts of school personnel, counselors, and rehabilitation placement officers, to provide an intensive work skills study and placement program for handicapped youths. Attempts will be made: (1) to compare level of post-school vocational success of trainees in this program with level achieved by a like group participating in the standard program now being offered; (2) to evaluate presently available educational and case history records to determine whether data contained therein are predictive of vocational success or failure; (3) to compare similar, as well as additional, data secured during the course of the project to determine whether they have predictive value for vocational success; (4) to develop guides for curriculum planning for handicapped school age youths; (5) to investigate the significance of the differential in vocational success between applicants of apparently equal competence and training, and to measure the differential in educational and vocational rehabilitation services required to bring about, if it is possible, an equalizing of vocational success; (6) to develop a handbook for training and placement workers; and (7) to determine the efficiency of a placement specialist in securing employment for those who are extensively handicapped.
Publication plans: Annual reports, final report, and probably some articles for educational journals.
Duration: 1962-1967.
Principal investigator: Paul R. Hunt, M.Ed., Department of Special Education, Detroit Public Schools, 453 Stimson, Detroit 1, Mich. (Reported by Paul H. Voelker, Ph.D., Divisional Director, Department of Special Education.)
Cooperating group: Office of Vocational Rehabilitation, U. S. Department of Health, Education, and Welfare.

16-Q-12 EFFECTIVENESS OF EARLY APPLICATION OF VOCATIONAL REHABILITATION SERVICES IN MEETING THE NEEDS OF HANDICAPPED STUDENTS IN A LARGE URBAN SCHOOL SYSTEM

Purpose: To demonstrate a method of serving the vocational rehabilitation needs of New York City students who present a problem of suitable vocational adjustment with currently available services.

Subjects: Students, age 14 or over, enrolled in special classes for the severely handicapped including those with mental retardation, social maladjustment, cerebral palsy, and miscellaneous problems.

Methods: Each student will receive complete evaluations to determine individual needs. For two years, demonstration students will receive an integrated program of services provided by the New York City Schools, voluntary rehabilitation centers and workshops and the New York State Division of Vocational Rehabilitation. Effectiveness of project services will be evaluated by comparing progress of demonstration and comparison students at several stages in regard to educational, vocational, personal and social development.

Duration: June 1962-June 1967.

Principal investigator: Morris Klapper, M.S., Division of Vocational Rehabilitation, New York State Education Department, Albany 1, N. Y. (Reported by Adrian Levy, Assistant Commissioner for Vocational Rehabilitation, New York State Education Department.)

Cooperating groups: New York City Board of Education; Federation Employment and Guidance Service; Federation of the Handicapped; Institute for the Crippled and Disabled; Division of Vocational Rehabilitation, New York State Education Department; Association for the Help of Retarded Children, Inc.; Office of Vocational Rehabilitation, U. S. Department of Health, Education, and Welfare.

16-Q-13 A GUIDED WORK EXPERIENCE PROGRAM FOR HANDICAPPED TEENAGERS

Purpose: (1) To demonstrate that a vocational program with educable mentally handicapped adolescents based on a rehabilitation workshop is more effective if begun in early adolescence than if begun in late adolescence; (2) to study the process of vocational development for educable mentally handicapped adolescents.

Subjects: 40 14 year old children attending special classes for educable mentally handicapped children in the Chicago area.

Methods: Two matched groups have been selected. Experimental group is participating in a rehabilitation workshop program and will receive a variety of services, graded in difficulty, for four to five years, or until they have had an opportunity to attempt work in competitive employment. Control group will receive rehabilitation service when they become 17. Annual measures are taken on both groups, beginning at age 14, to compare quality and rates of vocational development.

Publication plans: Articles for publication will be prepared.

Duration: July 1961-June 1964.

Principal investigator: William Gellman, Ph.D., Executive Director, Jewish Vocational Service, 1 S. Franklin St., Chicago 6, Ill. (Reported by Asher Soloff, Research Coordinator, Jewish Vocational Service.)

Cooperating groups: Chicago Heart Association; Chicago Board of Education; Niles Township Board of Education; United Cerebral Palsy Association; Wieboldt Foundation.

EXCEPTIONAL CHILDREN

Gifted

16-R-1 AN ABBREVIATED WISC FOR USE WITH GIFTED ELEMENTARY SCHOOL CHILDREN

Purpose: To test the feasibility of devising an abbreviated scale of the Wechsler Intelligence Scale for Children, which would be a valid measure of intelligence for gifted school children and at the same time would economize test administration time.
Subjects: 551 children identified as gifted with a full-scale score of 125 or above on the WISC, enrolled in a public elementary school, mean C.A. 10-2 years, mean I.Q. 133.
Methods: Test protocols were randomly divided--400 to use as a standardization group and 151 to use as a validation group. Design was to select the combination of subtests which correlated highest with the full scale I.Q. and at the same time met the economy of time criterion. The best subtest combination for prediction was selected by the Wherry-Doolittle test selection method. After the subtests were identified, they were summed for each individual and total was correlated with the criterion and a regression equation computed.
Findings: Selected subtests were similarities, block design, picture arrangement, information and picture completion. The multiple correlation for this subset was .75 with a standard error of 3.96 I.Q. points. The correlation between the actual and the predicted I.Q. for the validation group was .84.
Publication plans: Submitted for publication; duplicated copies available from Sonoma County Schools.
Duration: August 1960-October 1961.
Principal investigators: Jack M. Thompson, M.A., Director of Guidance, and Carmen J. Finley, Ph.D., Director of Research, Sonoma County Schools, 2555 Mendocino Ave., Santa Rosa, Calif.
Cooperating group: Rosenberg Foundation.

16-R-2 HIGH POTENTIAL SCALE OF MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

Purpose: Development of a scale to predict high potential in science in adolescents who have not as yet demonstrated high achievement.
Subjects: Normative group: 150 mathematically gifted adolescents who have demonstrated high achievement-high intelligence; and 150 adolescents with high intelligence-low achievement.
Methods: Development and cross-validation of a scale of MMPI. Six-week summer math camp experience for 30 high potential-low achievement children.
Publication plans: Journal of Clinical Psychology.
Duration: May 1962-May 1963.
Principal investigator: Wallace A. Kennedy, Ph.D., Staff Chairman, Human Development Clinic, Florida State University, Tallahassee, Fla.
Cooperating group: National Science Foundation.

16-R-3 THE LISTENING ABILITIES OF GIFTED CHILDREN

Purpose: To compare the listening abilities of gifted children in the intermediate grades with their other language skills.
Subjects: 100 intermediate grade gifted children.
Methods: Compare scores on STEP Listening Test with language ability scores obtained on Stanford Achievement Tests.
Publication plans: Journal of Educational Research or Journal of Educational Psychology.
Duration: Fall 1962-fall 1963.
Principal investigator: Patrick J. Groff, Ed.D., Associate Professor of Education, San Diego State College, San Diego, Calif.

Retarded

16-S-1 THIN-LAYER CHROMATOGRAPHY OF SPINAL FLUID LIPIDS

Methods: The lipids in cerebrospinal fluid will be extracted and separated by means of thin-layer chromatography. The patterns obtained from mentally retarded children and from those with various neurological disorders will be compared to patterns obtained from normal children and adults. This rapid ultramicro method of searching for lipid abnormalities in CSF will be evaluated as a diagnostic test.
Duration: 1962-1964.
Principal investigator: Alex Kaplan, Ph.D., Associate Professor of Biochemistry and Director, Clinical Chemistry Laboratory, University Hospital, University of Washington, Seattle 5, Wash.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-2 EVALUATION OF BIRTH DEFORMITIES IN THE PROVINCE OF ALBERTA

Purpose: To evaluate birth deformities in the Province of Alberta with relation to drugs and radioactive isotopes and also spermatogenesis in Mongols with relation to fertility studies.
Duration: 1959-1965.
Principal investigator: L. J. le Vann, L.R.C.P., L.R.C.S., Medical Superintendent and Lecturer in Psychiatry, University of Alberta, Edmonton, Alta.

16-S-3 THE GENETICS OF MENTAL RETARDATION--STUDIES OF CHROMOSOMAL ABNORMALITIES

Purpose: By doing chromosomal studies and correlating the abnormalities found with patients' mental and physical defects, it is hoped that "mapping" of human chromosomes, i.e., determining which chromosomes are responsible for specific aspects of the human make-up, will in time become possible. Chromosomal studies have been done with the mentally retarded and abnormalities found in patients with Mongolism, multiple congenital abnormalities, and gonadal anomalies. Preliminary studies have been done on some of patients in these and other categories, and it is planned to continue work on a larger scale.
Subjects: Population of over 2,300 mentally retarded patients of both sexes, all age groups, and many different diagnostic categories, at Wrentham State School; patients at the other three State Schools in Massachusetts in order to increase number of cases and to validate the consistency of findings.
Methods: It is planned to do chromosomal analyses of groups of patients belonging to specific diagnostic categories and, when abnormalities are found, to do further ancillary studies. These will include chromosomal studies on the patients' families and on other patients in the same diagnostic categories to determine the genetics of the abnormality and the uniformity of its existence in similar patients. Urinary amino acid studies and other biochemical determinations will be done as indicated.
Duration: 1961-1963.
Principal investigators: Charles V. Pryles, M.D., Director of Research, and Mary Ann O'Sullivan, M.D., Research Associate, Department of Research, Wrentham State School, Wrentham, Mass., and Leonard Atkins, M.D., Department of Pathology, Massachusetts General Hospital, Boston 14, Mass.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-4 BIOCHEMICAL DEFECTS IN MENTALLY RETARDED CHILDREN

Purpose: To characterize biochemical defects in retarded children and to determine effect on mental ability; to determine inheritance of biochemical defects.

Subjects: Children from Gracewood State School and Hospital and from the teaching hospitals and clinics of the Medical College of Georgia.

Methods: Metabolic studies determined by nature of defect under investigation.

Duration: January 1962-indefinite.

Principal investigators: W. Knowlton Hall, Ph.D., Professor and Chairman of Biochemistry, Margaret B. Coryell, Ph.D., Instructor in Biochemistry, Boyd D. Sisson, Ph.D., Associate Professor of Psychiatry, Medical College of Georgia, Augusta; Theo G. Thevaos, M.D., Assistant Clinical Professor of Pediatrics and Chief of Medical Education and Research, Gracewood State School and Hospital, Gracewood, Ga.

Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-5 PHENYLKETONURIA DETECTION

Purpose: To apply the Guthrie method of inhibition assay to: (1) determine feasibility of screening bloods of pregnant women to detect phenylketonuria; (2) establish normal levels of serum phenylalanine in large population groups; and (3) study the possibility of detecting the carrier state. To study family characteristics of known phenylketonuric families.

Subjects: Pregnant women (bloods already submitted for syphilis serology--19,000 per year); newborns in hospital nurseries; suspect groups of children with brain damage.

Methods: Guthrie method of phenylalanine determination with statistical analysis of results; epidemiological study of phenylketonuria.

Publication plans: Medical and public health journals.

Duration: August 1962-1965.

Principal investigator: Carl C. Ashley, M.D., Director, Maternal and Child Health Section, Oregon State Board of Health, P. O. Box 231, Portland 7, Oreg.

Cooperating groups: Oregon Fairview Home; Oregon State Hospital; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-S-6 MENTAL RETARDATION ASSOCIATED WITH DISORDERS OF LIPID METABOLISM

Purpose: To find evidence for inborn errors of lipid metabolism in mentally retarded children, especially in the familial types of retardation. The lecithins, cephalins, plasmalogens, sphingomyelins, and cerebrosides will be of primary interest, because of their importance to the structure and function of the central nervous system.

Subjects: Elwyn School population of 1,100 mental retardates; retardates referred from the Children's Hospital of Philadelphia; and outpatients examined at Elwyn Research and Evaluation Center.

Methods: Serum levels of phospholipids and cerebrosides will be measured by quantitative paper chromatography on silicic acid-impregnated paper.

Findings: No major abnormalities have been found to date.

Publication plans: Results will be published following further collection of data.

Duration: January 1962-December 1964.

Principal investigators: Richard L. Stambaugh, Ph.D., Director of Biochemistry, and Douglas T. Davidson, M.D., Director of Research, Elwyn Research and Evaluation Center, Elwyn School, Elwyn, Pa.

Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-7 METABOLIC STUDIES OF CHILDREN WITH MONGOLISM

Purpose: To learn the basis of the observed abnormalities in tryptophan metabolism.
Subjects: Mongoloid children.
Methods: Study of enzyme kynureninase in samples of liver from normal and Mongoloid individuals. Study of xanthurenic, kynurenic and 3 OH anthranilic acid excretion in Mongoloid and non-Mongoloid controls. Twenty-four hour urine collections done before and after a tryptophan load and reported at intervals during Deoxypyridoxine administration. These experiments are designed to show whether the decrease in xanthurenic acid excretion observed in Mongols is due to increased conversion of 3 OH kynurenine to 2 OH anthranilic acid.
Duration: 1962-1965.
Principal investigator: Ernest E. McCoy, M.D., Assistant Professor, Department of Pediatrics, University of Missouri School of Medicine, Columbia, Mo.
Cooperating group: National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-8 METABOLIC DISORDERS ASSOCIATED WITH MENTAL RETARDATION

Purpose: To study interrelationships between mental deficiency and metabolic disorders; to attempt to define the site and nature of the biochemical lesion in such disorders by investigation of affected children and their normal relatives; to determine if the manifestation of the metabolic defect can be altered by dietary or metabolic changes.
Subjects: Young infants born in Cincinnati General Hospital; mentally retarded children admitted to Children's Hospital; mentally retarded children seen at Hamilton County Diagnostic Clinic. Long-term studies on infants normal at birth to be used as controls for mentally retarded children.
Methods: Evaluation by laboratory tests including chromatography, enzymatic tests, routine procedures, physical examination, developmental studies.
Publication references: Findings reported in series of papers in pediatric journals.
Duration: April 1956-1966.
Principal investigator: Helen K. Berry, M.A., Assistant Professor of Research Pediatrics, University of Cincinnati College of Medicine, Cincinnati 29, Ohio.

16-S-9 STUDY ON CONGENITAL TOXOPLASMOSIS

Purpose: To investigate the possible incidence of congenital toxoplasmosis in a group of patients at the Hospital for the Mentally Retarded.
Subjects: A group aged 2 to 21 years.
Methods: Abstracting of pertinent data from 240 case records; carrying out laboratory tests on serums and skin tests.
Duration: September 1962-June 1963.
Principal investigator: Michael Elyan, M.D., D.C.H., Director of Clinical Research on the Mentally Handicapped, Hospital for The Mentally Retarded, Stockley, Georgetown, Del.
Cooperating group: Communicable Disease Center, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-10 STEREOTYPED MOVEMENTS OF MENTAL DEFECTIVES

Purpose: A series of four studies to describe stereotyped movements of mentally defective children and adults; to analyze their relationships to other individual characteristics, and to examine experimental variables to which they are sensitive.
Subjects: Severely defective institutionalized children and adults.

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Methods: Observational procedures (time-ruled checklist). Measurement of stereotyped movements, manipulations of the environment and manipulations of self when subject is given objects to play with in different situations.
Findings: Positive correlations of stereotyped movements with self-manipulations and age. Negative correlation with manipulation of environment. In experiments, providing subjects with objects to play with reduced stereotyped movements. Those with high level movements played less. Three situations varying in novelty did not affect level in subjects who characteristically had high level. In the latter subjects, having a person present decreased the movements slightly, but playing with him had no further effect.
Publication plans: American Journal of Mental Deficiency.
Duration: April 1961-indefinite.
Principal investigator: Gershon Berkson, Ph.D., Research Associate, Yerkes Laboratories of Primate Biology, Orange Park, Fla.
Cooperating groups: Sunland Training Center; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-11 COMMUNICATION BETWEEN MENTALLY RETARDED CHILDREN

Purpose: To describe the acquisition and transfer of communication behavior in mentally retarded children.
Subjects: Experiment I (Hollis): male and female subjects, mean age 11 years, with I.Q.'s between 15 and 40. Experiment II (Spradlin): male and female subjects, mean age 13 years, with I.Q.'s between 25 and 75.
Methods: The behaviors of paired subjects will be investigated under the following conditions: food-sharing, cooperation, and communication. The apparatus consists of a modified Wisconsin General Test Apparatus. Four pairs of carts were mounted and connected by expandable racks so that movement of one cart simultaneously moved the other in the opposite direction. This situation requires that the "operator" subject receive cues from the "informant" subject concerning which is the correct cart to pull. A correct response rewards both subjects. (See Mason and Hollis, "Communication between Young Rhesus Monkeys," Animal Behavior, 1962, in press.)
Publication plans: Journal of Abnormal and Social Psychology, American Journal of Mental Deficiency, or Child Development.
Duration: June 1962-December 1963.
Principal investigators: John H. Hollis, B.A., Research Associate, and Joseph Spradlin, Ph.D., Field Director, Bureau of Child Research, University of Kansas, Lawrence, Kans., and Parsons Research Project, Parsons State Hospital and Training Center, Parsons, Kans.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-12 AN INVESTIGATION OF VOCAL ENCODING IMPAIRMENT IN EDUCABLE MENTALLY RETARDED CHILDREN: DETECTION, REMEDIATION AND RELATED VARIABLES

Purpose: To determine the educability of a psycholinquistic function (vocal encoding ability, i.e., the ability to express one's ideas in words) in educable retarded children.
Subjects: 40 educable mentally retarded subjects--20 experimental, 20 controls--C.A. 8-0 to 15-5, M.A. 4-7 to 8-10, I.Q. 50 to 80.
Methods: Treatment consisted of intensive language training in the vocal encoding area, three times per week for an hour per day in small groups of four to five subjects. Treatment ran from February to June. Measures include pre- and post-testing with the ITPA, and with a number of Templin's classical measures of language development. In addition, data will be analyzed for correlational relationships between a number of specified variables and response to treatment. A three-month retention study to determine the permanence of language improvement (in vocal encoding) conducted during fall 1962. Controls received the weekly classical language measures to control for the Hawthorne effect.
Publication plans: Dissertation Abstracts; American Journal of Mental Deficiency.
Duration: February 1962-September 1962.

Principal investigator: Kenneth R. Blessing, M.Ed., Coordinator, Services for Mentally Retarded, Bureau for Handicapped Children, Wisconsin State Department of Public Instruction, 122 W. Mifflin, Madison, Wis.

16-S-13 PERPETUAL CHILD

Purpose: To demonstrate the possibilities of verbal learning in high level Mongoloids
Subjects: A case study of a Mongoloid to age 47, with edited diary from age 11 to 46.
Methods: Complete combing and editing of the diaries; selection of the pertinent and parallel. Testing of verbal and readability levels (present g.p. 7.8). Clinical and interview data rounding out the case history.
Findings: With careful instruction, in this case individual using the kinesthetic method, a high level of reading and writing performance is possible, together with the development of intellectual interests. However, the dependency and need for supervision continue.
Duration: February 1961-December 1962.
Principal investigator: May V. Seagoe, Ph.D., Professor and Assistant Dean, School of Education, University of California at Los Angeles, Los Angeles 24, Calif.
Cooperating group: University of California at Los Angeles.

16-S-14 BEHAVIORAL CONDITIONING ANALYSIS OF DISCRIMINATION DEFICITS IN RETARDED CHILDREN

Purpose: To explore the ability of behavior conditioning techniques for analyzing specific individual deficits in basic discrimination processes among retarded children.
Subjects: 25 students (residents) of Walter E. Fernald State School, ages 7 to 21 with mixed diagnoses, and 4 normals, ages 6 to 15.
Methods: Intensive individual experimental analysis using full environmental control, direct, simultaneous, and continuous measurement and automatic programming of stimulus presentations and response-contingent reinforcements.
Findings: The method is extremely sensitive to a broad range of reliably different individual patterns in "adjustive" behavior even among children preselected as "homogeneous" with respect to I.Q., age, sex, and socio-economic background. Specific deficits which are differentially amenable to modification by environmental consequences have been located. Current analysis is focusing on the prosthetic (reversible) versus therapeutic (nonreversible) effects of such modification.
Publication references and plans: American Journal of Mental Deficiency 67: 424-436, 1962; four other publications in preparation.
Duration: February 1961-1966.
Principal investigator: Beatrice H. Barrett, Ph.D., Director of Psychological Research, Walter E. Fernald State School, Massachusetts State Department of Mental Health, Waverley 78, Mass.

16-S-15 PERCEPTUAL EFFICIENCY AND CONCEPTUAL ABILITY OF MENTAL RETARDATES

Purpose: To evaluate the usefulness of several psychodiagnostic tests in differentiating between brain-damaged and nonbrain-damaged retardates (trainable and educable).
Subjects: 100 children in special education classes in elementary and junior high school grades.
Methods: Individual testing with Frostig test, Rutgers Figure Test, WISC, and Peabody Picture Vocabulary Test.
Publication plans: Probably a monograph.
Duration: September 1962-June 1963.
Principal investigators: Robert M. Allen, Ph.D., Professor of Psychology, R. Wayne Jones, M.S., Graduate Research Fellow, and Douglas Haupt, M.S., Graduate Student, University of Miami, Coral Gables 46, Fla.

16-S-16 CONCEPTUAL PERFORMANCE IN MENTALLY RETARDED CHILDREN

Purpose: To explore verbal and nonverbal cognitive processes underlying conceptual behavior by investigating: (a) language-relevant versus nonlanguage-relevant concepts (opposite versus sameness and symmetry); (b) verbal versus nonverbal stimuli (words versus pictures); and (c) verbal versus nonverbal response (classification by sorting out exemplars versus by verbalizing concept).
Subjects: Educable mentally retarded children (I.Q. 50 to 70) from public and parochial special education classes at M.A. levels 6 through 9.
Methods: Subjects were individually administered three tasks which varied in degree to which language experience might facilitate discovery of the conceptual principle accounting for the correct choice on a series of trials. The concepts of sameness and symmetry were exemplified by drawn geometrical figures and of opposition by selecting large versus small on a graduated series of wooden discs; transfer of the latter concept was tested by presenting materials varying in length, volume, number, brightness, position, and texture. Second task consisted of presenting 18 sets of seven items in parallel forms for words versus pictures with instructions to select three that went together; subsequently subjects were shown the correct triads and asked to verbalize the basis of the grouping. Performance was compared with that of children of normal intelligence and of deaf children of normal intelligence (latter group was studied earlier by Furth, see Bulletin 13, Research Relating to Children).
Findings: Retarded children performed as well as controls in solving problems where perceptual rather than verbal modes of solution were more suitable, but performed less well in discovering and in subsequently applying a language-relevant concept. Results of second study showed that elimination of verbal elements facilitated classificatory behavior especially for retarded subjects; verbal input was especially difficult for the younger age groups.
Publication plans: First study presented at American Association on Mental Deficiency meeting, 1962; submitted to American Journal of Mental Deficiency. Second study read at American Psychological Association meeting, 1962; submitted to Journal of Abnormal and Social Psychology.
Duration: January 1962-December 1962.
Principal investigators: Norman A. Milgram, Ph.D., and Hans G. Furth, Ph.D., Assistant Professors, Department of Psychology and Psychiatry, Catholic University of America, Washington 17, D. C.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-17 THINKING PROCESSES IN MENTALLY RETARDED CHILDREN

Purpose: To explore further the nature of thought structure and process in mentally retarded children; to examine the effects of emotional disturbance and brain injury on thought processes.
Subjects: "Educable" mentally retarded children at Wayne County Training School, C.A. 7 to 18, I.Q. 50 to 100.
Methods: Use of various tests on selected groups. If pilot studies show distinct thought patterns in different groups, next stage would be to use techniques to overcome any impairment, e.g., reading and arithmetic taught differently to subjects with concrete rather than with abstract thought abilities.
Findings: So far: emotional disturbance tends to be related to lower abstract thinking level.
Publication plans: Journal of General Psychology, in press.
Duration: December 1961-June 1963.
Principal investigator: Roger Reger, M.A., Psychologist I, Wayne County Training School, Northville, Mich.

16-S-18 DEVELOPMENT OF A SCALE OF "REAL-LIFE" OR SOCIAL INTELLIGENCE

Purpose: Development of a scale as an aid in the assessment of mentally retarded children as needing special education or training.
Subjects: Children currently referred for examination as mentally retarded.

Methods: Circularization of second edition of experimental schedule to assessing authorities, with a view to the establishment of a normative profile.
Duration: October 1960-June 1964.
Principal investigators: Denis H. Stott, Ph.D., Lecturer in Psychology, University of Glasgow, Glasgow W. 2., and L. H. Duncan, M.A., Principal Psychologist, Ayrshire, Scotland.
Cooperating groups: Medical Officers of Health; County Psychological Services.

16-S-19 EFFECTS OF TEST ANXIETY ON THE INTELLIGENCE TEST PERFORMANCE OF MENTALLY RETARDED SHCOOL CHILDREN

Subjects: 80 children (C.A. 7-7 to 15-10) attending Pacific State Hospital School. All subjects were resident patients at the hospital.
Methods: A modification of Sarason's Test Anxiety Scale for Children (TASC) was administered to each subject, after which he was given the Stanford-Binet under either "tough" or "tender" conditions. Half the subjects were also given the WISC.
Findings: Performance was not affected by test conditions. High- and low-anxious subjects did not differ in Stanford-Binet I.Q. or WISC full scale I.Q., but high-anxious subjects had significantly lower WISC performance I.Q.'s than low-anxious subjects.
Publication plans: Possibly in American Journal of Mental Deficiency.
Duration: September 1961-December 1962.
Principal investigator: Arthur B. Silverstein, Ph.D., Research Psychologist, Pacific State Hospital, P. O. Box 100, Pomona, Calif.
Cooperating group: California State Department of Mental Hygiene.

16-S-20 SOME ASPECTS OF AN ORAL-VISUAL PRESENTATION OF AN ACHIEVEMENT TEST TO EDUCABLE MENTALLY RETARDED PUPILS

Purpose: To determine whether an oral-visual administration of a standardized achievement test would give significantly higher achievement scores for educable mentally retarded pupils than would the usual written test.
Subjects: 241 educable mentally retarded pupils in elementary and secondary classes in Union and Clinton counties, Pennsylvania.
Methods: Half of the pupils were given an oral-visual adaptation of the Word Meaning subtest and the Arithmetic Reasoning subtest of the Stanford Achievement Test, Form J, and a week later were given the usual written form of the same subtests, Form K. Remaining pupils were given an oral-visual adaptation of the Word Meaning subtest and the Arithmetic Reasoning subtest of the Stanford Achievement Test, Form K, and a week later were given the usual written form of the same subtests, Form J.
Findings: A t ratio of the difference between the oral-visual and the usual written administration of the Word Meaning subtest from the Stanford Achievement Test was significant beyond the .001 level. A t ratio of the difference between the oral-visual and the usual written administration of the Arithmetic Reasoning subtest from the Stanford Achievement Test was significant beyond the .001 level. Results of the oral-visual administration were significant for both subtests at mental age levels of 60 to 155 months.
Publication plans: Plan to submit an abstract to American Journal of Mental Deficiency.
Duration: September 1960-September 1962.
Principal investigator: John A. Long, Jr., D.Ed., Principal, Highland Elementary School, Camp Hill, Pa.

16-S-21 PARENTAL ATTITUDES AND SOCIAL GROWTH OF THE RETARDED

Purpose: On the basis of a self-concept, social-reinforcement theoretical orientation, relationships are being sought between the social development of preschool retarded children and the attitudes that each parent has toward the self, spouse, and the child. Previous research with

Silhouette Test of Interpersonal Relationships indicated that children's self-concepts were significantly related to their parents' ratings of them, as well as their popularity level with their peers. In the present context, ratings by each parent of self, spouse, and child, as well as a variety of other measures of parent attitudes, are being related to test and observational material concerning the child, with the hypothesis that social development in excess of intellectual development on the part of the retarded child is associated with parents' acceptance of self, spouse, and child, as well as the levels of communication and agreement between parents and accuracy of their appraisal of the child's abilities and limitations. Also, the extensive data obtained from each mother-father-retarded child constellation are being interrelated through intensive statistical and psychodynamically interpretive family studies with the objective of thus obtaining, through a long series of individual studies, findings which might well be cancelled out in the overall multi-method pattern analysis of group data.
Duration: January 1960-December 1963.
Principal investigators: Ralph W. Colvin, Ph.D., Director of Research and Psychological Services, Astor Home for Children, Rhinebeck, N. Y.; Anne M. Ritter, Ph.D., Director of Psychological Services, and Anne L. Preston, M.A., Research Associate, Kennedy Child Study Center, 151 E. 67th St., New York 21, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-22 MONGOLOID CHILDREN LIVING AT HOME

Purpose: Pilot phase of a study of Mongoloid children who live at home and are seen in an outpatient child study center. To compare this population of Mongoloid children with two matched groups: non-Mongoloid children comparably retarded who are also outpatients, and Mongoloid children who live in an institution. It is hypothesized that (1) Mongoloid children when compared with non-Mongoloid equally retarded children will be found to be more accepted as handicapped and deviant; and (2) Mongoloid children reared at home will be more competent intellectually than those reared in an institution, but they will be less secure.
Duration: June 1962-May 1963.
Principal investigators: Thomas W. Richards, Ph.D., Director, Psychology and Research, and Russell Sands, M.D., Chief of Medical Services, Kennedy Child Study Center, Santa Monica, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-23 A COMPARATIVE STUDY OF A PROGRAM OF SERVICES OFFERED TO PARENTS OF MENTALLY RETARDED CHILDREN

Purpose: To evaluate parents' and patients' adjustment after admission to a hospital for the mentally retarded.
Subjects: 200 families who applied for admission to Pacific State Hospital.
Methods: Aggressive casework with parents; group meetings with parents; ward tours to acquaint parents with hospital facilities; tests of statistical significance were measured on many different items.
Publication plans: Several small papers may result.
Duration: November 1959-December 1962.
Principal investigators: Mrs. Florence G. Stellern, M.A., Senior Psychiatric Social Worker, and Sheldon J. Brown, M.A., Supervising Psychiatric Social Worker, Pacific State Hospital, P. O. Box 100, Pomona, Calif.

16-S-24 AN ANALYSIS OF THE VOCATIONAL INTERESTS OF EDUCABLE MENTALLY RETARDED BOYS FROM THREE OCCUPATIONAL CLASSES

Purpose: An exploratory investigation to provide information on: (1) vocational interest

patterns as measured by the Geist Picture Interest Inventory (GPII); (2) stated hobbies and vocational preference of these youths; and (3) influence of father's occupational class upon vocational interest patterns and preferences.
Subjects: 90 male, white, educable retardates, ages 12-0 to 20-11, enrolled in a special educational program, and having no evidence of physical handicaps or psychoses--45 whose fathers were employed at skilled or semi-skilled work, 25 whose fathers were employed at skilled clerical or middle grade service jobs, and 20 whose fathers had professional or managerial positions.
Methods: Subjects were administered the GPII individually, followed by a structured interview with each boy. T scores, item analyses, and t tests of significance were among the items used to determine the influence of father's occupation upon vocational preference and interest pattern.
Findings: (1) GPII is a usable screening method for interest of these boys; (2) stated vocational interests of the retardates showed a consistent trend toward interest in unskilled and semi-skilled work, less interest in skilled and clerical jobs, and very little in professional and managerial positions. Furthermore, interests were generally consistent with reference to occupational class of fathers; subjects from different occupational classes showed significant differences in area of interest (music, outdoors, etc.).
Duration: 1960-1961.
Principal investigator: James F. Magary (Ph.D. Candidate), Coordinator of Special Education, University of Southern California, Los Angeles 7, Calif.

16-S-25 DOUBLE-BLIND STUDY ON CEREBRAL PALSY, AND POLIO PATIENTS, AND RETARDED CHILDREN

Purpose: Use of new compound in helping these subjects.
Subjects: Voluntary patients.
Methods: Double-blind study with muscle test, movies, psychological evaluations, subjective and objective findings.
Findings: All of the 20 private patients have steadily improved after having been on the compound for three years.
Publication plans: Publication at the completion of the study.
Duration: September 1962-September 1963.
Principal investigators: Fred R. Cochrane, Jr., M.D., and Robert E. Miller, Jr., M.D., Department of Pediatrics, Charlotte Rehabilitation Hospital, 1610 Brunswick Ave., Charlotte, N. C.
Cooperating group: Voluntary contributors.

16-S-26 A DEMONSTRATION PROJECT EVALUATING THE EFFECTIVENESS AND METHODOLOGY OF GROUP THERAPY FOR ADOLESCENT RETARDATES

Purpose: To evaluate the effectiveness and therapeutic advantages in a group therapy program for retarded adolescents within a clinical diagnostic and treatment setting, and to clarify and adapt the methodology and techniques of group therapy with the retarded.
Methods: The plan of operation is to set up various combinations of groups for high, moderate, and low functioning adolescents with simultaneous group counseling of parents. Complete interdisciplinary evaluation will be made before, after, and periodically during treatment. Detailed accounts of each session will be maintained. Processing of raw data will be concurrent, so that the total progress of the groups can be analyzed for the purpose of extracting a methodology that will offer guidelines to practitioners and stimulate further interest in refining and applying other psychotherapeutic approaches to the needs of the retarded.
Duration: June 1962-May 1963.
Principal investigators: Lawrence Goodman, M.S.W., ACSW, Chief Social Psychiatric Worker, and Margaret J. Giannini, M.D., Administrative Director, Mental Retardation Clinic; Ruth Rothman, M.S.S.W., ACSW, Consultant in Group Therapy and Clinical Assistant in Pediatrics, and Stella Chess, M.D., Chief, Division of Child Psychiatry; New York Medical College, Flower and Fifth Ave. Hospitals, New York, N. Y.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-S-27 A STUDY OF ON-THE-WARD TRAINING OF TRAINABLE MENTALLY RETARDED CHILDREN IN A STATE INSTITUTION

Purpose: To investigate ward environment relative to what is currently done by the ward staff to train children in the skills and behaviors included in the San Francisco Social Competency Scale. To determine characteristic level or adequacy of training undertaken by ward personnel, the amount of time ward personnel attempt training in social competence, etc.
Subjects: Trainable mentally retarded children residing on six wards in a state institution, selected on the basis of ability to meet the criterion of "trainable" and the hospital's stated objective of training for this population. Approximately 70 nursing service personnel assigned to the wards.
Methods: An observation instrument which includes a unidimensional scheme of training levels ranging from no training to optimal training, and includes areas of training related to the San Francisco Social Competency Scale. Wards will be observed by two observers for approximately 270 hours. Data will be analyzed with respect to: amount of time that ward personnel attempt any training and training in social competence characteristic level or adequacy of training undertaken by ward personnel; relationship between amount and characteristic level of training in social competence and the social competency scores of the children being trained; relationship between amount and characteristic level of training carried out by ward personnel and their years of experience, chronological age, sex, and education; ward personnel's perspective of feasibility of training children in an institution setting. An interview schedule will be developed for interviewing staff.
Publication plans: On completion, study will be published by California State Department of Mental Hygiene.
Duration: January 1962-June 1963.
Principal investigators: Paul W. Thormahlen (Ed.D. Candidate), School Principal, Allen H. Middleton, M.A., Research Assistant, and Margaret Stanford, Ph.D., Clinical Psychologist, Sonoma State Hospital, Eldridge, Calif.
Cooperating group: Research Division, California State Department of Mental Hygiene.

16-S-28 POPULATION MOVEMENT STUDY

Purpose: To study the processes of admission, interaction on the wards, release, escape or unauthorized absence, and post-release employment, adjustment, etc., of mentally retarded patients of the Pacific State Hospital.
Methods: Examination of admission records and processes, sociological and anthropological methods of observation, development and use of a factor-pure test battery to measure abilities of the subjects, etc.
Publication references: Training School Bulletin 58:2: 74-76, August 1961.
Duration: June 1957-August 1962.
Principal investigators: Harvey F. Dingman, Ph.D., Research Specialist III, and George Tarjan, M.D., Superintendent and Medical Director, Pacific State Hospital, P. O. Box 100, Pomona, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-S-29 DATA PROCESSING IN MENTAL DEFICIENCY

Purpose: A series of research projects in mental deficiency made possible through use of automation and medical records.
Subjects: Wards of the Pacific State Hospital.
Methods: Data is transferred from precoded medical record forms to punched cards or magnetic tape which are then processed automatically to give selected information on patient treatment, medical problems, incidence of communicable diseases and epidemics, estimates of patient susceptibility to diseases, prediction of construction needs, etc.
Publication references: Medical Record News, April 1962.
Duration: June 1960-May 1963.

Principal investigators: Harvey F. Dingman, Ph.D., Research Specialist III, and George Tarjan, M.D., Superintendent and Medical Director, Pacific State Hospital, P. O. Box 100, Pomona, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Physically handicapped

16-T-1 BRITISH COLUMBIA RECORD LINKAGE STUDY

Purpose: (1) To develop a facility for studying the reproductive histories of families with handicapped children (to detect differentials of fertility) as compared with families not having handicapped children. (2) To organize the records so that other follow-up studies can be done (e.g., of death and handicap in twins, empiric risks in subsequent sibs, etc.).
Methods: Computer "linkages" of records of live births, stillbirths, handicapped children, and child deaths into family groups using the marriage record of the parents where these are present in the files. Complete records for a population of greater than 10^6 people, from 1946 onward (about 10,000 marriages and 40,000 births per year).
Publication references: Family Linkage of Vital and Health Records, Atomic Energy of Canada Limited, July 1957 (reprinted August 1961); A Plan for the Study of Fertility of Relatives of Children Suffering from Hereditary and Other Defects, Atomic Energy of Canada Limited, November 1957 (reprinted December 1960); Canadian Journal of Genetics and Cytology 1:1:13-15, July 1959; Science 130:3381:954-959, October 16, 1959: Eugenics Quarterly 9:1:25-35, March 1962: etc.
Duration: 1956-continuing.
Principal investigator: Howard B. Newcombe, Ph.D., Head, Biology Branch, Atomic Energy of Canada, Ltd., Chalk River, Ont.
Cooperating group: Dominion Bureau of Statistics.

16-T-2 REHABILITATION OF CHILDREN WITH SPINA BIFIDA MANIFESTA AND MYELOMENINGOCELE

Purpose: To evaluate the muscle weakness, sensory losses, urological problems, and learning disabilities of children with myelomeningocele.
Subjects: 100 children with this congenital anomaly.
Duration: June 1962-May 1964.
Principal investigator: Chester A. Swinyard, M.D., Ph.D., Director, Children's Division, Institute of Physical Medicine and Rehabilitation, New York University Medical Center, New York, N.Y.

16-T-3 RESIDUAL BRAIN IMPAIRMENT IN PREMATURE CHILDREN

Purpose: To investigate the psychological, medical, and neurological effects of prematurity in very light weight premature children.
Subjects: Premature children from one month up to 15 years with appropriate controls.
Methods: Children will be studied medically, psychologically, and neurologically to determine presence of minimal brain damage, and to develop techniques for detecting these conditions early.
Publication plans: Data expected to be published.
Duration: January 1963-January 1965.

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Principal investigators: George K. Yacorzynski, Ph.D., Professor and Head, Division of Psychology, Jerome Cohen, Ph.D., Associate Professor, and Jack Arbit, Ph.D., Associate, Department of Neurology and Psychiatry, Northwestern University Medical School, 303 E. Chicago Ave., Chicago 11, Ill.
Cooperating group: Michael Reese Hospital.

16-T-4 PSYCHOLOGICAL IMPLICATIONS OF CRYPTORCHISM

Purpose: To study the psychological aspects of cryptorchism. There has been little work done in this area, but the existence and importance of the psychological impact of this disorder upon the child and his family is generally well recognized.
Subjects: Two groups of children: (1) children with cryptorchism before any surgical intervention; (2) children who had orchiopexy done at least one year before being seen in study.
Methods: Parents of children will be interviewed in detail by a psychiatric social worker and information will be sought about child's physical, emotional and social development, his performance at school, at home and at play. Parents will be encouraged to express their feelings about the child's disability and their reaction to it. Child will be seen by a child psychiatrist with former training in pediatrics. Direct and indirect techniques commonly used in child psychiatry will be utilized to obtain a personality profile of the child. Child will be encouraged to draw a man, a woman, and the inside of the body. These drawings will be independently evaluated by a psychologist in order to detect any possible distortions of the child's body image.
Duration: November 1961-November 1962.
Principal investigators: Leon Cytryn, M.D., Fellow in Psychiatry, Department of Psychiatry, Eileen Cytryn, M.S.W., Psychiatric Social Worker, Research Foundation of the Children's Hospital of the District of Columbia, 2125 13th St., N.W., Washington 9, D. C.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-T-5 PERCEPTUAL CLOSURE AND CONSTANCY IN DEAF CHILDREN

Purpose: To examine effects of deafness on visual organizing processes in adolescent boys, using simple perceptual techniques. Since fundamental processes in perception are largely related to and determine overt behavior, an understanding of perceptual dynamics would help clarify the relatively more complex problems of personal and social adjustment of deaf children.
Subjects: 51 organically deaf adolescent boys and 51 nondeaf adolescent boys, from residential secondary schools in New Jersey. Except for deafness, the two groups were essentially similar.
Methods: Administration of two tests: Taylor Perceptual Closure Scale (consists of "Boy" and "House" subscales which have 26 mm. gaps in the line drawings; subjects are to copy the figures with the gaps) measuring a tendency to complete incomplete configurations during reproduction; Frenkel-Brunswik Scale which measures perseveration tendencies (consists of 10 cards of which the first is clearly a dog and the tenth clearly a cat; intermediate cards are gradual transitional forms. Subjects identified each card, one at a time).
Findings: The hypotheses were supported: deaf subjects closed open configurations and perseverated in initial perceptual responses significantly more than nondeaf subjects, supporting the general contention that an auditory handicap has generalized rigidifying effects manifest in other sensory modalities.
Publication plans: Submitted to Journal of Speech and Hearing Disorders.
Duration: 1960-1961.
Principal investigators: Irving A. Taylor, Ph.D., Associate Professor of Psychology, San Fernando Valley State College, Northridge, Calif., and Martin H. Wodin, Ph.D., Tappan Zee High School, Orangeburg, N. Y.

16-T-6 PERCEPTUAL-MOTOR DEVELOPMENT OF CHILDREN WITH SEVERE CEREBRAL DYSFUNCTION

Purpose: To evaluate possible effects of basic motor and visual perceptual training on children who are diagnosed as cerebral palsied, mentally retarded, epileptic, and/or emotionally disturbed.
Subjects: 16 children who displayed symtoms of organicity and were diagnosed as stated above--8 children in control and 8 in experimental groups, C.A.'s 8-11 to 18-0.
Methods: Each subject was evaluated at the beginning of the study by individual psychological assessment, optometric evaluation, educational evaluation, medical assessment, motor assessment, social and developmental case history. Each subject will be re-evaluated at the end of the study through the same methods. In addition to written report, visual recordation is being done on motion picture film.
Findings: A statistical analysis of two of the preliminary assessments, Bobath Motor Assessment and Test of Basic Form Perception, revealed that selection of children for the two groups seems to be adequate.
Publication plans: Definite dates for publication have not yet been set. Film and statistical data should be ready for release in 1963.
Duration: October 1961-spring 1963.
Principal investigators: Caro Hatcher, Ed.D., Certified Psychologist, Eileen Lai, O.T.R., B.S., Occupational Therapist, and J. Michael Siepp, B.A., Coordinator of Research, Spastic Children's Foundation, 1307 W. 105th St., Los Angeles 44, Calif.

16-T-7 STUDIES ON ASTHMATIC CHILDREN

Purpose: To study: (1) iodotherapy and thyroid function in children; (2) childhood asthma and steroid therapy as factors influencing growth; (3) role of anabolic steroid therapy in promoting growth; and (4) somatic and environmental factors in the evaluation and progress of childhood asthma.
Subjects: 150 asthmatic children in residence at Children's Asthma Research Institute and Hospital.
Methods: Clinical and laboratory observations.
Publication references and plans: Journal of Allergy 32:69-81, 1961; 32:420-434, 1961. American Journal of Diseases of Children 99:428-436, 1960, and article in press.
Duration: 1958-1961.
Principal investigator: Constantine J. Falliers, M.D., Director of Clinical Services, Children's Asthma Research Institute and Hospital, 3401 W. 19th Ave., Denver 4, Colo.
Cooperating group: University of Colorado Medical Center.

16-T-8 THE MATURATION OF INFANTS CONFINED TO ORTHOPEDIC CASTS AND SPLINTS

Purpose: To determine if casts or splints worn between ages of four to eight months have any effect on the normal course of development as measured at eight months.
Subjects: 18 infants of Philadelphia National Institute of Neurological Diseases and Blindness Perinatal Research Sample, all normal except for orthopedic correction; normative group of 200 infants drawn from same sample.
Methods: Bayley first year mental and motor development scales given to all infants at age eight months as part of NINDB data collection. Average performance expectation, item by item, established on normative group of 200. Scores of 18 infants confined to casts and splints compared to scores of normative group.
Findings: In all areas of development--mental, fine motor, and gross motor--the infants who had worn casts and splints were able to meet or exceed average performance expectations.
Publication plans: Paper will be submitted to an orthopedic journal.
Duration: January 1961-September 1962.
Principal investigator: Jean F. Stein, Ph.D., Psychologist, Woods Schools, Langhorne, Pa.
Cooperating group: Data from National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-T-9 INTELLECTUAL AND PERSONALITY FUNCTIONING IN PHYSICALLY DISABLED CHILDREN EVALUATED DURING AN INITIAL SCHOOL EXPERIENCE

Purpose: To evaluate and analyze the intellectual and personality functioning of a group of physically disabled children who are being given the opportunity of attending a full-time elementary school program after years of having received no more schooling than a few hours per week of homebound instruction.
Subjects: Approximately 25 physically disabled children ranging in age from 7 to 14 years; disabilities include paraplegics and various orthopedic problems.
Methods: Intellectual functioning will be evaluated by standard intelligence and academic achievement tests. Personality functioning will be determined by projective psychological tests, including Rorschach, House-Tree-Person, and Brown Personality Inventory for Children. Tests will be administered during first month of school and then readministered at the end of a year's school experience to evaluate intellectual and personality changes. Comparisons will be made with a normal control group and available normative data reported in the literature.
Publication plans: Papers will be submitted to appropriate professional journals.
Duration: Fall 1962-fall 1963.
Principal investigator: Edmund C. Neuhaus, Ph.D., Director of Psychological and Educational Services, Human Resources Foundation, Albertson, N. Y.

16-T-10 PSYCHOSOCIAL CORRELATES OF IRON DEFICIENCY ANEMIA IN CHILDREN

Purpose: To study iron deficiency anemia in young children in relation to feeding practices, psychological care, and socio-economic factors. It is hoped that a profile in some depth will be gained of the environmental circumstance and feeding experiences of children with iron deficiency anemia. Further, data will be used to plan an encompassing investigation into the mutual interaction of feeding practices, iron deficiency anemia and later character development and distortion in children.
Subjects: Basic sample consists of all children (144) with iron deficiency anemia hospitalized in one year at Children's Hospital.
Methods: Hospital record analysis of 113 items was done on sample. Fifty of the cases will be chosen by random numbers for home visit interviews to gather intensive data related to feeding practices and psychological interaction as well as to perform hemoglobin determinations. Seventy-five inpatients of the hospital will be used as an approximate control group for the original sample. Data will be analyzed for anecdotal significance and with statistical tests.
Duration: 1962-not reported.
Principal investigators: Sidney L. Werkman, M.D., Research Associate, Department of Psychiatry, Research Foundation of Children's Hospital of the District of Columbia, and Thomas Skelly, Research Assistant, George Washington University Medical School, Washington, D. C.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-T-11 CONSCIENCE DEVELOPMENT IN DEAF CHILDREN

Purpose: To study deaf children's responses to four Piaget stories involving moral judgments.
Subjects: 30 children attending the Lexington School for the Deaf, New York City.
Methods: Individual interviews with the children. Their responses to the stories will be classified into one of Piaget's levels of development and compared with control group.
Publication plans: Journal article.
Duration: January-June 1963.
Principal investigator: Martin L. Nass, Ph.D., Assistant Professor, Educational Clinic, Brooklyn College, City University of New York, Brooklyn 10, N. Y.
Cooperating groups: Lexington School for the Deaf; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-T-12 SMILE AND FEAR OF STRANGERS IN CONGENITALLY BLIND INFANTS

Purpose: To determine if vision is or is not prerequisite to normal smiling and fear of strangers in infancy.
Subjects: Congenitally blind infants have been observed directly, and retrospective data have been gathered from 13 families.
Methods: Periodic observations and films are made of the blind infants; parents of older blind children are interviewed.
Findings: All children studied smiled as infants. Many smiled somewhat later than normal sibs, usually to auditory stimuli. There are fewer reports of fear of strangers in the first year in blind than in seeing sibs.
Duration: June 1962-March 1963.
Principal investigator: Daniel G. Freedman, Ph.D., Research Specialist, Langley-Porter Neuropsychiatric Institute, San Francisco, Calif.
Cooperating group: California State Department of Mental Hygiene.

16-T-13 CONSTRUCTION AND STANDARDIZATION OF A BATTERY OF BRAILLE SKILL TESTS

Purpose: To construct and standardize a battery of tests for measuring the braille skills needed in reading and number work. The proposed battery of tests is not concerned with reading and mathematical skills as such, but with the ability to use the braille literary code and certain systems of braille mathematical notation.
Methods: Two sets of tests are to be constructed--one in the area of "braille reading skills" and the other in the area of "braille mathematical skills." The tests of "braille reading skill" will be based upon grade II braille. There will be three overlapping levels in each area with two equivalent forms at each level. This will provide a total of 12 tests in the completed battery. Each test will be divided into subtests to facilitate diagnostic evaluation of relative strengths and weaknesses in braille skill. These tests will provide teachers of the blind with objective measurement data regarding a student's overall development in braille as well as provide a means for analyzing the student's strengths and weaknesses.
Duration: July 1962-December 1963.
Principal investigators: Richard W. Woodcock, Ed.D., Associate Professor of Special Education, and Stanley E. Bourgeault, A.M., Instructor in Special Education, Colorado State College, Greeley, Colo.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

THE CHILD IN THE FAMILY

Family background and relations

16-U-1 SEX RATIO OF OFFSPRING OF SELECTED POPULATION GROUPS

Purpose: To determine sex ratio of offspring of subjects selected for special attributes (i.e., presence of disease, ethnic background, maturation pattern).

Subjects: Patients in a prenatal and a specialty clinic.

Methods: Sex ratio of offspring of selected subjects determined through direct questioning and hospital records.

Duration: 1960-1963.

Principal investigator: Robert W. Hillman, M.D., M.P.H., Professor, Department of Environmental Medicine and Community Health, State University of New York Downstate Medical Center, 450 Clarkson Ave., Brooklyn 3, N. Y.

Cooperating groups: Department of Obstetrics, Brooklyn Hospital; Red Hook Health Center Nutrition Clinic, New York City Department of Health.

16-U-2 DISTRIBUTION OF SEXES WITHIN HUMAN FAMILIES

Purpose: To determine whether there is correlation between the sex of adjacent sibs.

Subjects: More than 75,000 family records that give information on the date of birth of father and mother, the sex and date of birth of each child up to a total of nine, and the total number of children.

Methods: Analysis will be carried out by the use of conditional probabilities. In this way, any effect due to correlation between the sex of adjacent sibs can be separated from effects that might be produced by: variation from birth to birth, within a family, of the probability that a child will be a male; variation from one family to another of the probability that a child will be a male; and limitation of family size after a certain preferred combination of sexes has been obtained.

Duration: January 1962-December 1963.

Principal investigators: Colin White, M.B., B.S., Professor of Public Health (Biometry), and Richard A. Greenberg, Instructor in Biometry, Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, Conn.

Cooperating group: National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-U-3 THE RELATIONSHIP OF EMOTIONAL ADJUSTMENT AND ATTITUDES TO THE COURSE AND OUTCOME OF PREGNANCY, AND THEIR MODIFIABILITY THROUGH A PROGRAM OF EXPECTANT PARENT EDUCATION

Purpose: To determine, in an obstetric population in a group practice medical care program, the extent to which emotional adjustment and attitudes may affect the course and outcome of the maternity cycle. To determine, for a sample of this obstetric population, the extent to which a program of group expectant parent education can modify emotional adjustment and attitudes and affect the course and outcome of the maternity cycle.

Subjects: 600 to 1,000 women first seen early in pregnancy, followed through the maternity cycle.

Methods: A series of questionnaires (to be completed by the subjects) and rating scales (to be completed by obstetric and pediatric personnel) are being developed to evaluate women's attitudes and behavior early in pregnancy, late in pregnancy, during labor and delivery, and during the postpartum period. Measures are also being developed to evaluate the status of the babies at birth and during a three-month follow-up.

Duration: July 1961-June 1964.

Principal investigators: Edwin F. Daily, M.D., Vice President (Medical), Elaine R. Grimm, Ph.D., Research Psychologist, and Wanda R. LeRoy, R.N., Nurse Educator, Health Insurance Plan of Greater New York, 625 Madison Ave., New York 32, N. Y.
Cooperating groups: Jamaica Medical Group; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-U-4 MOTHER-INFANT DREAM PATTERNS

Purpose: An attempt to obtain normative data regarding cyclic variations in mother-infant nocturnal behavior.
Methods: Mothers and newborn infants will be studied in an EEG laboratory one night each week for one year. Rapid eye movements, body movements and electroencephalograms will be recorded on both mother and infant. Behavioral observations will be made in terms of feeding patterns and other aspects of the mother-infant relationship. Normal mothers (both nursing and nonnursing) will be studied. Mothers with colicy infants and anxious mothers will be observed after normative data have been obtained.
Duration: 1962-1963.
Principal investigators: Boyd K. Lester, M.D., and Chester M. Pierce, M.D., Assistant Professors, Department of Psychiatry, Neurology and Behavioral Sciences, University of Oklahoma School of Medicine, 800 N.E. 13, Oklahoma City 4, Okla.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-U-5 EFFECTS OF SEPARATING TWO YEAR OLD CHILDREN FROM THEIR MOTHERS

Purpose: To study changes over time in the behavior of young children separated from their families and to attempt to answer the following questions: To what extent can differential reactions during the first week of separation be understood in terms of previous family background? To what extent is the child's behavior both during separation and following reunion with his parents a function of the length of separation? How does the child typically cope with the stress of separation? How are changes in the child associated with possible changes in the family, expecially his mother?
Subjects: Sample of 10 children, aged 16 to 30 months, during the first three weeks of separation in a residential nursery; a similar control group of 10 children living at home.
Methods: Use of categories to quantify observed behavior in the nursery, in the home after reunion, and in doll play sessions; clinical impressions of behavior of the child and also of home and family.
Publication plans: Monograph in 1964.
Principal investigators: Christoph M. Heinicke, Ph.D., Research Associate, Psychiatric Clinic, Mt. Zion Hospital and Medical Center, 1600 Divisadero St., San Francisco 15, Calif. (Formerly, Tavistock Child Development Research Unit), and Miss Ilse Westheimer, Psychiatric Social Worker, Child Guidance Training Centre, London, England (Formerly, Tavistock Child Development Research Unit). (Reported by John Bowlby, M.D., Director, Tavistock Child Development Research Unit, Tavistock Clinic, 2 Beaumont St., London W.1, England.)

16-U-6 COMMON RESPONSES OF YOUNG CHILDREN TO SEPARATION

Purpose: To provide illustrations from case material of common responses of young children to short and long separations from their mothers and to reunion with them afterwards; to discuss theoretical problems raised by these responses.
Subjects: Children between two and four years undergoing short and long separations in residential nurseries and sanatoria.
Methods: Direct observation, with use of ciné records in some cases.

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Publication plans: It is planned to publish in two volumes in 1964.
Duration: 1951-1964.
Principal investigators: John Bowlby, M.D., Director, and James Robertson, Senior Project Officer, Tavistock Child Development Research Unit, Tavistock Clinic, 2 Beaumont St., London W.1, England.

16-U-7 TRADITIONAL AND EMERGENT FAMILY TYPES AND THEIR RELATION TO FAMILY INTERPERSONAL RELATIONSHIPS

Purpose: To discover whether the quality of the husband-wife, parent-child, and child-peer relationships vary with respect to variations in the authoritarian structure of families. In particular, are the interpersonal relationships of higher, or lower, quality in patriarchal families as compared to equalitarian families?
Subjects: (1) 1956 survey of 150 midwest Mennonite families; (2) 1961 survey of 215 rural families in northern Indiana; (3) 1962 survey of 600 urban and rural families in Germany; and (4) projected survey in 1963-64 of 500 additional American urban and rural families.
Methods: Questionnaires being administered by the researcher in personal contact with respondents. The 1956 study (for doctoral dissertation) involved the completion of questionnaires by husband, wife, and oldest child in each family. Subsequent studies rely on questionnaires completed in school by 13 and 14 year old children.
Findings: Evidence is accumulating that the patriarchal authority structure is less conducive than equalitarian patterns to good interpersonal relations in families. The more traditional the family patterns, the lower the average husband-wife, child-parent, and child-peer scale scores. Evidence to date also indicates that child deviancy and neurotic symptoms are somewhat more frequent in authoritarian than in equalitarian families.
Publication references: Marriage and Family Living 23:3:247-252, August 1961.
Duration: 1961-August 1964.
Principal investigator: J. Howard Kauffman, Ph.D., Professor of Sociology, Goshen College, Goshen, Ind.
Cooperating groups: Goshen College and Mennonite Research Foundation in earlier phases.

16-U-8 PARENT-CHILD RELATIONSHIPS AND ADOLESCENT'S DESIRE TO LEAVE HOME

Purpose: Hypotheses: (1) to the degree that early and adolescent experience of personal parent-child relations have been inadequate and unsatisfying, adolescents tend to want to leave home; to the degree that these relations have been adequate and satisfying, adolescents tend not to want to leave home; and (2) early and adolescent experience of parent-child relations of a nondemanding, nonintrusive, but adequately nurturant, sort would have little or no effect upon the adolescent's desire to leave home.
Subjects: 20 male and 20 female graduating students selected randomly from each of five Salt Lake City high schools.
Methods: Subjects were administered two questionnaires, one concerning parent-child relations and one designed to elicit pertinent biographical data; statistical correlations of information received on questionnaires.
Duration: February-July 1962.
Principal investigator: Henry van der Velden, Ph.D. Candidate, Department of Sociology, University of Utah, Salt Lake City, Utah.
Cooperating groups: Salt Lake City Public Schools; Catholic Diocese of Salt Lake City.

16-U-9 PARENT BEHAVIOR AND THE DEVELOPMENT OF GUILT REACTIVITY IN THE CHILD

Subjects: The entire sixth grade population of the public school system of Auburn, New York--328 subjects living with both parents at time of study.
Methods: Structured questionnaire (child reports on parental behavior in the dimensions of nurturance-indifference and discipline). An inventory scale of transgression-retribution anxiety. A projective story completion measure of transgression-instigated guilt reactivity. A Hartshorne and May "test of deceit."

Publication references and plans: Psychological Reports 10:2:357-358, April 1962; another article in press. Other publications planned.
Duration: January 1959-September 1963.
Principal investigator: Sanford M. Unger, Ph.D., Research Psychologist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

16-U-10 INTRAFAMILY TRANSMISSION OF CRITICAL JUDGMENT

Purpose: To investigate the degree to which parental evaluation (critical judgment) of television is transmitted to the child; to adapt techniques (previously used with adults) for measuring the evaluative attitudes of children; and to examine extent to which children adopt the critical judgment of their parents toward television. Central hypothesis is that child adopts parental attitudes with regard to televiewing. This is based on proposition that it is neither program content nor amount of viewing that provide the central impact upon the child. Rather, it is the manner in which content and act are supervised and evaluated by his parent. The meaning that television has for the child is the meaning that his parent gives it. Further, it seems likely that critical evaluation of mass media may reflect other modes of child rearing on the part of the parents, and other areas of behavior on the part of the child.
Subjects: 100 fourth and 100 seventh grade children.
Methods: On the basis of subjects' replies to the Semantic Differential, children will be divided into four quartiles according to their evaluation of television. Data will be collected from parents by use of the same techniques. In particular, both parents of the 25 most critically evaluative children (upper quartile) and both parents of the 25 least critically evaluative children (lower quartile) will be contacted.
Duration: January 1962-June 1963.
Principal investigator: Robert D. Hess, Ph.D., Associate Professor and Chairman, Committee on Human Development, University of Chicago, Chicago 37, Ill.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-U-11 FAMILY INTERACTION STUDIES USING REVEALED DIFFERENCES

Purpose: Strodtbeck has previously studied decision-making as related to cultural role expectations of Texan, Mormon, and Navaho husbands and wives using technique of revealed differences. He also investigated transmission of achievement-related attitudes in second generation Italian and Jewish families having adolescent sons. Sangree replicated this study with Japanese-American families. In the present research, revealed differences will be used in three ways: (1) to explore ways in which power and supportiveness patterns in families with highly gifted children, male and female, differ from those in families with more average children, and to relate dyadic interaction to that in three-person groups; (2) to investigate power-supportiveness patterns in female-based households to test the hypothesis that male offspring in such households develop sex-identification problems leading to exaggerated attempts to demonstrate masculinity and to juvenile delinquency; and (3) to study the relationship of family supportiveness and power patterns to political ideology.
Methods: Family members are asked to discuss, and to achieve consensus on, value statements about which, on the basis of their individual responses, it can be shown they disagree. The protocols arising from the interaction over these revealed differences are scored using Bales' categories and other content systems to ascertain relative power and supportiveness of family members.
Duration: March 1962-February 1963.
Principal investigators: Fred L. Strodtbeck, Ph.D., Associate Professor, and Mayer N. Zald, Instructor, Departments of Sociology and Psychology; Anthony Kallet, Ph.D., Post-doctoral Fellow, and Robert Gordon, Research Assistant, Department of Sociology, University of Chicago, Chicago 37, Ill.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-U-12 DESISION-MAKING IN NORMAL AND PATHOLOGIC FAMILIES

Purpose: To investigate the basic characteristics of the family decision-making process and its relationship to psychopathology in the individual and in the family group.
Subjects: Family triads to be categorized by means of operational divisions into normal and pathologic groups. In the pathologic group, subgroups would be considered more specifically, particularly the schizophrenia-producing families and the delinquency-producing families.
Methods: Two methods to be followed: (1) the family members are requested to strive toward some common family decision about hypothetical situations; (2) they are requested to strive toward the telling of a story that integrates some TAT cards. The interactions of the above method will be taped and classified and summarized.
Publication plans: Journal publication anticipated.
Duration: June 1962-May 1964.
Principal investigators: Antonio J. Ferreira, M.D., Psychiatrist and Research Consultant, and William D. Winter, Ph.D., Associate Professor of Psychology, San Jose State College, San Jose, Calif.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-U-13 CHILDREN OF SCHIZOPHRENIC PARENTS

Purpose: To study the psychosocial adjustment of children of schizophrenic parents.
Subjects: Children having a parent who has been diagnosed as schizophrenic. Control groups: (1) children from same classrooms as study children, and (2) children having one parent with chronic physical disability.
Methods: Psychiatric interviews, psychological tests, behavior scales.
Duration: July 1962-not reported.
Principal investigators: Arnold R. Beisser, M.D., Chief of Professional Education, and Norbert Glasser, Ph.D., Clinical Psychologist II, Metropolitan State Hospital, 11400 S. Norwalk Blvd., Norwalk, Calif.

16-U-14 THE "CRIME-SPOUSE" AND HER FAMILY

Purpose: It is hypothesized that there exists an abnormal psychopathology in the families of law offenders.
Subjects: Patients on parole from state correctional institutions, their wives and children.
Methods: A complete profile study of members of the offenders' families, including the children, by means of anamneses, process recordings of treatment, and a psychodiagnostic battery of tests.
Publication plans: Publication is planned.
Duration: September 1962-September 1963.
Principal investigator: Hans A. Illing, M.S.W., Ph.D., Senior Psychiatric Social Worker, Parole Outpatient Clinic, California State Department of Corrections, 107 S. Broadway, Los Angeles 12, Calif.

16-U-15 THE EFFECT OF FATHERS' ALCOHOLISM ON THE ADJUSTMENT OF CHILDREN

Purpose: (1) To compare children of alcoholics with those of nonalcoholics in respect to prevalence of social and psychological problems; (2) to develop an instrument which will measure child adjustment; and (3) to examine family life correlates.
Subjects: 106 mothers who were wives of alcoholics who had attended one or more meetings of Alanon Family Groups in Seattle since 1952, and who were the subjects of a larger project on Alcoholism and the Family; 67 wives of nonalcoholics, matched for age, length of marriage, number of children, education, and area of residence. Subjects were divided into experimental and replication groups.

Methods: Child Adjustment Questionnaire; MMPI evaluation of mother; Interpersonal Check List in which respondent rated self and husband under conditions of drunk-sober or, for nonalcoholics, things going smoothly or not smoothly; interviews on family adaptations to alcoholism, drinking history, parental childhood experience, parent-child relationships at present; marital adjustment scales.
Findings: Children of alcoholics had more problems in more areas than children of nonalcoholics. Number of problems is related to mother's disturbance (MMPI), to aspects of father's drinking pattern, to role default by parents, to realistic education of the child about alcoholism.
Publication plans: Article to be submitted to journal early in 1963.
Duration: 1959-1963.
Principal investigators: Gerald Johnston, B.S., Medical Student Research Trainee, Joan K. Jackson, Ph.D., Research Associate Professor, and Kate L. Kogan, Ph.D., Clinical Assistant Professor, Department of Psychiatry, University of Washington School of Medicine, Seattle 5, Wash.

16-U-16 HEMIPLEGIA AND SOCIAL STRUCTURE

Purpose: To study patterns of adjustment of two contrasting social institutions--family and rehabilitation center--to the hemiplegic (stroke) patient. An effort will be made to identify patterns of adjustment of the family unit to role reorganization because, often, children of the hemiplegic patient find themselves bearing much of the responsibility in their families.
Subjects: 40 families and patients who have experienced a cerebral vascular accident; personnel of a rehabilitation center.
Methods: Case analysis of patterns of family adaptation and participant observation at the rehabilitation center.
Findings: Adjustment of family is related to previous structure, extent of role change, and necessary substitutions which often result in a family crisis. Status and role concerns of rehabilitation specialists often result in treatment arrangements that are dysfunctional for patients.
Publication plans: Study will be submitted for publication.
Duration: September 1961-October 1962.
Principal investigator: Martin D. Adler (Ph.D. Candidate, University of Pittsburgh), Executive Director, Southeastern Community Guidance Association, 4232 Brownsville Rd., Pittsburgh 27, Pa.

16-U-17 FAMILY HEALTH AND ILLNESS BEHAVIOR

Purpose: To investigate the effects of family patterns of interaction on the illness behavior of family members. The concept of illness behavior is concerned with the way symptoms are perceived, evaluated, and acted upon by a person who recognizes pain, discomfort or other signs of malfunction (see Journal of Chronic Diseases 15:189-194, February 1962). Concern is with the influence upon illness behavior of each of the following: child-rearing practices relevant to health, situational pressures upon the family, role relationships within the family and family definitions of health resources.
Subjects: Sample includes 350 mothers and their children, surveyed independently. Children in fourth and eighth grades were selected through the school census.
Methods: Data were collected through interviews with mothers in their homes and questionnaires administered to children in the classrooms. Other data obtained include family health logs, teachers' ratings of children's inclinations toward stoicism and hypochondriasis, school attendance records, etc.
Duration: September 1961-September 1963.
Principal investigator: David Mechanic, Ph.D., Associate Professor, Department of Sociology, University of Wisconsin, Madison, Wis.
Cooperating group: Health Information Foundation.

16-U-18 CHILD AND FAMILY FACTORS IN ACCIDENTAL INJURY

Purpose: Investigation of human and environmental factors associated with accidental injury in preschool children has proved important, since traditional methods of accident prevention in this age group are not only inadequate, but the risk of disability and death are much greater.
Subjects: One to six year old hospitalized children studied prospectively after admittance to the Children's Hospital Medical Center for accidental injury. A comparison group of children and families chosen at random from among the Family Health Program population at the medical center.
Methods: Hospital and home visiting by a professional team of pediatrician, social worker, nursery school teacher and ancillary workers, using interview schedules and developmental testing.
Findings: Highly significant association with many developmental and family life stresses immediately preceding injury was found. While the mechanism of action was not always evident, children's psychophysiologic states and inadequacy of supervision coupled with social disorganization patterns appeared to forge the links leading to accidental injury.
Publication plans: Publication in near future.
Duration: March 1961-March 1962.
Principal investigator: Roger J. Meyer, M.D., M.P.H., Assistant Professor of Community Medicine and Epidemiology, and Director, Family Care Unit, University of Vermont College of Medicine, 25 Colchester Ave., Burlington, Vt. (Formerly, Director, Child and Family Health Division, Children's Hospital Medical Center, and Harvard Medical School, Boston, Mass.
Cooperating group: Public Health Service, U. S. Department of Health, Education, and Welfare.

Child-rearing attitudes and practices

16-V-1 ANTECEDENTS OF SOCIAL REINFORCEMENT

Purpose: To investigate child-training procedures which lead to enhanced effectiveness of social reinforcers on a motor-conditioning task.
Subjects: 60 seven to eight year old children and their mothers.
Methods: Children individually tested in laboratory learning situation, and indices of: (1) response to social reinforcers; and (2) persuasibility obtained. Mothers given short (30-minute) semistructured interview regarding particular child-training practices followed with these children.
Findings: To whatever extent parental training procedures affect a child's response to social reinforcers, their influence is mediated by highly specific experiences. The single clearest antecedent of social reinforcer effectiveness was the frequency of the father's use of praise as a means of control. The less frequent a child's exposure to paternal praise, the greater his response to social reinforcers in the laboratory.
Publication plans: To be published.
Duration: March 1961-December 1962.
Principal investigator: Robert B. Cairns, Ph.D., Assistant Professor of Psychology, Indiana University, Bloomington, Ind.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-V-2 NURTURANT POWER AND MODEL ATTRIBUTES OF PARENTS AND THE CONSISTENCY OF BEHAVIOR IN ADOLESCENTS

Purpose: To clarify the relationships between: (1) the relative reinforcing properties of the mother and father as given by their relative degree of nurturance toward the child; (2) the

relative personality attributes which the parents present as models for imitation by the child; and (3) the consistency of the child's behavior in interpersonal situations as well as the consistency the child shows between his anticipations of social rewards and punishments and the behaviors manifested socially.
Subjects: College undergraduates at the University of Iowa, about 60 of each sex.
Methods: The measurement of parental nurturance, model attributes, and the two consistency variables was accomplished psychometrically. Each measure represents the subjects' perception of the parents or of himself.
Findings: Early findings suggest that systematic relationships do exist between the two parent variables, presumed to be antecedents, and the two measures of behavioral consistency. Further, these relationships vary as a function of sex of the child. Since both consistency measures have been shown to be related to maladjustment in adolescents, it is anticipated that the results will have implications in this regard.
Publication plans: Results will be submitted to Child Development, Journal of Abnormal and Social Psychology, Journal of Personality, or Journal of Consulting Psychology.
Duration: April 1962-September 1962.
Principal investigator: Alfred B. Heilbrun, Jr., Ph.D., Associate Professor of Psychology, State University of Iowa, Iowa City, Iowa.

16-V-3 PERSONALITY ATTRIBUTES ASSOCIATED WITH VARIOUS MECHANISMS OF MASCULINE IDENTIFICATION

Purpose: To evaluate the personality characteristics of boys whose masculine identification is based on any of the three mechanisms: (1) nurturance together with punitiveness of the father, (2) warmth and nurturance of the father, and (3) punitiveness of the father. To determine whether boys who rate high in masculinity and perceive their father as nurturant have more positive self-concepts and personality characteristics, as compared with those who also rate high in masculinity but perceive their father as either punitive or both punitive and nurturant.
Subjects: Three groups of kindergarten-age boys who rate high in masculinity and perceive their father as (1) nurturant, (2) punitive, and (3) both punitive and nurturant. All individuals will be white Americans, residents of Pittsburgh, belonging to intact families, and scoring in the highest quartile according to the measures of masculinity.
Methods: Analysis of variance will be performed to determine the significance of difference in personality characteristics and self-conceptions.
Duration: August 1962-May 1964.
Principal investigators: Rachel M. Inselberg, Assistant Professor, and Laura Searls, Research Assistant, Department of Home Economics, Carnegie Institute of Technology, Pittsburgh 13, Pa.
Cooperating group: Office of Education, U. S. Department of Health, Education, and Welfare.

16-V-4 IDENTIFICATION IN CHILDREN

Purpose: To investigate the relationship between structural and functional aspects of the family on the one hand and of identifications of offspring on the other. According to present but still tentative plans, the offspring's identification with his parents will be related to two antecedent conditions which will constitute the major sampling classification criteria: (1) the structure of the larger family (extended versus nuclear), and (2) the structure of the immediate (or nuclear) family (two parents versus one parent). Three intervening conditions will also be related to the offspring's parental identifications: (1) degree to which the family performs functions of integrating offspring into society and of socialization-education of the offspring; (2) resources of the family, and (3) exercise of parental power. The offspring's identification with his parents will be determined for both personality and role-related variables. Hypotheses relating structural and functional conditions to role and personality identification will be tested.
Duration: 1962-1964.
Principal investigator: Robert Francis Winch, Ph.D., Professor of Sociology, Northwestern University, Evanston, Ill.
Cooperating group: National Science Foundation.

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16-V-5 BIRTH ORDER, PERSONALITY, AND CONFORMITY

Purpose: To test certain hypothesized relationships between a person's order of birth within his family, nature of child-rearing practices employed to rear him, relationships with his sibs, development of certain personality traits such as achievement, affiliation, anxiety, etc., and his conformity in a social influence situation.
Subjects: Approximately 400 persons in junior and senior high school in the Berkeley area, from one- or two-child families, divided into subgroups on the basis of sex, birth order, and sex of sib.
Methods: Data involve responses to questionnaire items, numerical scale scores, and indices of personality, socio-economic status, sib relationships, etc., as well as experimental measures of conformity. A questionnaire and letter were mailed to the home of each subject in the high school sample. Following return of the forms, subjects met in a large classroom for two separate testing sessions of about one hour each.
Publication plans: Probably a series of journal articles dealing with certain selected significant, yet independent, aspects of the entire project.
Duration: September 1961-June 1963.
Principal investigator: Edward E. Sampson, Ph.D., Assistant Professor, Department of Psychology, University of California, Berkeley 4, Calif. (Reported by Francena T. Hancock, Research Psychologist, Department of Psychology.)
Cooperating groups: Berkeley Unified School District; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-V-6 THE EFFECTS OF REARING BY GOVERNESS ON BIRTH ORDER AND CONFORMITY

Subjects: High school students.
Publication plans: A psychological journal.
Duration: June 1962-November 1962.
Principal investigator: Selwyn W. Becker, Ph.D., Assistant Professor of Psychology, Graduate School of Business, University of Chicago, Chicago 37, Ill.

16-V-7 EXPERIMENTAL STUDIES OF THE EFFECTS OF EARLY CHILD-REARING PRACTICES AND NURSERY SCHOOL EXPERIENCES ON THE INTELLECTUAL, SOCIAL, AND PERSONALITY DEVELOPMENT OF YOUNG CHILDREN

Purpose: To study intellectual, social, and personality development in preschool children as a function of: early child-rearing practices, experience in the nursery school setting, and experimental manipulations of specific intellectual and socio-emotional variables.
Subjects: 30 three year old children and their parents; 45 four and five year old children.
Methods: Longitudinal case study permits intensive and simultaneous study of patterns of variables and interactions between variables within individual children, as well as group comparisons of children receiving the experimental condition (nursery school attendance) and a control group. Children in longitudinal study are tested with such instruments as Stanford-Binet and Illinois Test of Psycholinguistic Abilities. Cross-sectional experimental studies are to be carried out with four and five year old children. Specific aspects (e.g., adult nurturance, control techniques) of child's environment will be manipulated in the laboratory nursery school setting. Other studies attempt to manipulate various aspects of intellectual functioning (e.g., inductive and deductive reasoning) by means of special training sessions. Child's status and progress are assessed before and after training and performance is compared with that of a control child who has had no special training experiences.
Publication plans: Findings will be published, but specific publication plans have not been formulated as yet.
Duration: September 1962-July 1963.
Principal investigators: Britton K. Ruebush, Ph.D., Assistant Professor of Child Psychology, and Shirley G. Moore, Ph.D., Associate Professor of Child Psychology, University of Minnesota, Minneapolis 14, Minn.
Cooperating group: University of Minnesota Graduate School.

16-V-8 SELF-HELP WITH FAMILY PROBLEMS

Purpose: To experiment with techniques of inducing low-education mothers to read simply written materials about child rearing, and to measure the effect of these materials upon their attitudes and child-rearing practices.
Duration: March 1962-March 1963.
Principal investigators: Donald J. Bogue, Ph.D., Director, Community and Family Study Center, and Margaret Peil, Ph.D. Candidate, University of Chicago, Chicago 37, Ill.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

SOCIAL, ECONOMIC, AND CULTURAL INFLUENCES

16-W-1 CHILD CARE IN CROSS-CULTURAL PERSPECTIVE

Purpose: Recent studies in some Communist countries and Western democracies on the care of children living away from their parents seem to have yielded very diverse results. Studies in the U.S.S.R. find institutional care of children to result in well-integrated, wholesome personalities; studies in the U. S. and Great Britain find evidence to the contrary. This study will attempt to determine by on-the spot observation the validity of the hypothesis that these discrepancies in research findings reflect the expectations of the adult in each of the social systems.
Duration: 1962-1963.
Principal investigator: Martin Wolins, D.S.W., Associate Professor, School of Social Welfare, University of California, Berkeley 4, Calif.
Cooperating groups: International Union for Child Welfare; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-W-2 PATTERNS OF CHILD REARING IN THE PHILIPPINES

Purpose: A cross-cultural study of attitudes and practices of parents in the Philippines. Research is designed to clarify the pattern of attitudes which parents hold and to relate these patterns to personality development in the Filipino. This will permit the evaluation of hypotheses concerning the impact of childhood experience on adult personality which have been formulated in other countries.
Subjects: Mothers of Philippine children in the area around Manila.
Methods: Reliance has been on structured interviews and on questionnaires, the latter used only where a satisfactory degree of literacy is present.
Publication references: The Filipino Child and Philippine Society, Philippine Normal College Press, 1961, available from Cellar Book Shop, Box 6, College Park Station, Detroit 21, Mich.
Duration: 1959-1963.
Principal investigators: George M. Guthrie, Ph.D., Professor of Psychology, Pennsylvania State University, University Park, Pa., and Pepita G. Jimenez, Doctoral Candidate, Pennsylvania State University (on leave from Philippine Normal College).
Cooperating group: Pennsylvania State University.

16-W-3 CHILD REARING IN GREECE

Purpose: To study patterns of child rearing in Greece, testing hypotheses regarding child rearing and child personality which emerged from earlier study (Child Rearing in Lebanon, Harvard Press. 1961).
Subjects: Mothers of five year olds in two cities and four villages of Greece.
Methods: Interviews with mothers. Interviews follow those of earlier study which were modeled after interviews used by Sears, Maccoby, and Levin in Patterns of Child Rearing.
Publication plans: Plan to publish a series of articles in American psychological journals.
Duration: June 1962-February 1963.
Principal investigator: Edwin T. Prothro, Ph.D., Professor of Psychology, American University of Beirut, Beirut, Lebanon.
Cooperating group: Social Science Research Council.

16-W-4 COMPETENT ADOLESCENTS IN PUERTO RICO: A CROSS-CULTURAL STUDY

Purpose: To test the cross-cultural validity of the Student TAT and to sharpen our theoretical formulations of coping behavior. It is proposed to discover how cultural attitudes, beliefs and practices affect patterns of coping behavior and personality development and the various resources and techniques of the Puerto Rican adolescents in adapting to new situations.
Subjects: A sample of 20 high school students selected from the University High School of the University of Puerto Rico. Six of these students came to the continental United States to study; the remainder enrolled at the University of Puerto Rico.
Methods: Group and individual interviews, Student TAT and additional psychological tests. By comparing preliminary findings of the Puerto Rican and NIMH samples, similarities and differences in anticipatory attitudes and activities characteristic of the two cultures were found. Further testing and interviewing is being conducted.
Duration: March 1961-March 1964.
Principal investigators: E. D. Maldonado-Sierra, M.D., Executive Director, Puerto Rico Institute of Psychiatry, Inc., Bayamon, Puerto Rico; George V. Coelho, Ph.D., Visiting Scientist, Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

16-W-5 JAPANESE CHILDREN'S PERSONALITY DEVELOPMENT AND HOUSEHOLD COMPOSITION

Purpose: To investigate the effect of presence or absence of family members, especially grandparents, on children's personality development.
Subjects: 900 Japanese school children in the city of Fukuoka.
Methods: Questionnaires; interviews with parents (restricted sample).
Publication plans: Monograph or series of papers.
Duration: July 1961-July 1964.
Principal investigator: John L. Fischer, Ph.D., Associate Professor, Department of Sociology and Anthropology, Tulane University, New Orleans 18, La.
Cooperating groups: Research Institute of Comparative Education and Culture, Kyushu University; National Science Foundation.

16-W-6 FAMILY STRUCTURE, ACHIEVEMENT MOTIVATION, AND ECONOMIC GROWTH

Purpose: To study the relationship of family structure and socialization to the development of achievement motivation and values and their effects on economic growth in Brazil.
Subjects: Preadolescent boys and their parents in several communities in Brazil.
Methods: A projective test will be used to measure certain aspects of personality. Questionnaires, interviews and observation in the field will be employed to obtain data on family structure and socialization.
Publication references and plans: Article in American Sociological Review, October 1962, concerns earlier phase of this study. Plans for future publications depend upon further collection and analysis of data.
Duration: June 1962-May 1965.
Principal investigator: Bernard C. Rosen, Ph.D., Associate Professor, Department of Sociology, University of Nebraska, Lincoln, Nebr.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-W-7 SOCIAL-CULTURAL DIVERGENCE OF LIKE-SEX TWINS

Purpose: Comparison of environmental differences in like-sex twin partners to test validity of the "Twin Method" of research into genetic control of personality and physical traits.
Subjects: 96 pairs of like-sex twins, 6 in each age from 1 year through 16 years--approximately 50 percent fraternal, 50 percent identical, in each age group, and 50 percent female, 50 percent male.
Methods: Depth interviews with each mother, supplemented by direct observation and additional interviews with teachers, fathers, or twins in 20 percent of sample. These empirical data have been coded, scales developed for each variable, i.e., in-group process within twin dyad; parental relationship; differences in peer relations; and differences in activities pursued. Additional data will be presented in tabular form.
Publication plans: Plan to publish in form of monograph.
Duration: November 1960-July 1962.
Principal investigator: Rosemary Kutak (Ph.D. Candidate), Research Sociologist, Child Development Unit, University of Louisville, Louisville, Ky.

16-W-8 INTERRELATIONSHIPS AMONG GUILT AND HONESTY IN VARIOUS ETHNIC GROUPS

Purpose: A previous study (Bulletin 15, Research Relating to Children) demonstrated a highly significant difference between Caucasians and Samoans in both covert and overt honesty. Purpose of present research is to replicate the previous research with a subsample of urban children in Honolulu, and to determine whether or not the covert results can be demonstrated for various other ethnic groups living either in an urban or rural setting.
Subjects: Approximately 300 Orientals, Hawaiians (and/or part-Hawaiians), Samoans, and Caucasians, from three public schools on Oahu, one in Honolulu, the others in outlying areas. Both sexes and various grade levels from 7 through 11 are represented.
Methods: For part of the urban sample (subsample consisting of Orientals, Hawaiians, and Caucasians), overt honesty will be determined in an actual behavioral situation, while covert honesty will be determined via a projective story completion test. For the remaining subjects (of the same ethnic membership as those in the city subsample), only the projective story completion test data (i.e., covert honesty measure) will be obtained. For the city subsample, the association between covert and overt honesty will be determined, as well as whether or not the association differs significantly from previous findings. In addition, it will be determined whether the association differs among ethnic groups. The total real sample will be broken down into subsamples in various predetermined groups, and a multiple regression analysis will be performed on each of the several different story completion scores. Scores will be regressed on school grade, sex, and ethnic group.
Publication plans: Plan to submit to an appropriate psychology journal.
Duration: January 1962-June 1963.
Principal investigators: Robert E. McMichael, Ph.D., Assistant Professor of Psychology, Michigan State University, East Lansing, Mich., and Robert E. Grinder, Ed.M., Assistant Professor of Educational Psychology, University of Wisconsin, Madison, Wis.
Cooperating group: Michigan State University.

16-W-9 SOCIALIZATION AND VALUES IN THE NEGRO AND EAST INDIAN SUBCULTURES OF TRINIDAD

Purpose: (1) To establish differences in socialization and values between Negroes and East Indians; (2) to examine these differences in the light of subcultural development; (3) to show that differences in socialization and values are maintaining the cultural disparity of Negroes and East Indians in Trinidad.

Subjects: Negro and East Indian mothers (50 of each) in maternity wards of hospitals; Negro and East Indian school children (400 of each).
Methods: Depth interviews and objective questionnaires.
Findings: Negor mothers and school children show a significantly greater degree than East Indians of "extent of social reference," "independence training," and "direct action." East Indian mothers and school children show a significantly greater degree than Negroes of "parent-child closeness," "work orientation," "material concern," "internalization," and "prosocial aggression."
Publication plans: Publication in a psychological journal or by a publishing house such as Prentice-Hall.
Duration: June 1960-November 1962.
Principal investigator: Helen B. Green (Ph.D. Candidate, University of Connecticut), Lecturer in Psychology, Wesleyan University, Middletown, Conn.

16-W-10 SOCIALIZATION IN A RURAL AUSTRIAN COMMUNITY

Purpose: To identify particularly those influences which create attitudes favorable for technical development and related forms of culture change. Previous research in this village has revealed extremely favorable attitudes to technical change on the part of the rural population.
Subjects: Children and parents in Altirdning, Steiermark, Austria.
Methods: Observation.
Publication plans: Journal articles.
Duration: June 1962-not reported.
Principal investigators: John J. Honigmann, Ph.D., Professor of Anthropology, University of North Carolina, and Irma Honigmann, B.A., Chapel Hill, N. C.
Cooperating groups: Institute for Research in Social Science, University of North Carolina; American Philosophical Society.

16-W-11 STUDY OF LEISURE-TIME NEEDS AND SERVICES, VALUES, IDEALS, AND ETHICAL BELIEFS OF EDMONTON YOUNG PEOPLE

Purpose: (1) To survey the leisure-time services and facilities available to youth in the Edmonton area; (2) to obtain an appraisal of leisure-time activities by youth themselves; and (3) to explore the values, ideals, and beliefs of Edmonton youth.
Subjects: 86 boys and 70 girls, aged 13 to 20 years, living in the northeast section of Edmonton, Alberta.
Methods: Stratified random sample. Questionnaires, interviews, statistical tabulations.
Publication references: Interim report, *North East Edmonton Young People*, available from investigator.
Duration: Fall 1959-indefinite.
Principal investigator: Gustave A. deCocq, M.S.W., Research Consultant, Council of Community Services of Edmonton and District, 10011-103rd. St., Edmonton, Alta.
Cooperating groups: University of Alberta; North-East Edmonton Community Council.

16-W-12 EDUCATION AND MARGINALITY IN THE COMMUNAL SOCIETY OF THE HUTTERITES

Purpose: To observe methods of socialization in a communal society and to discover the ways in which persons deviate from communal living. Answers are sought to two fundamental questions: (1) under what conditions and by what methods are moral values transmitted to children in a communal society; (2) under what conditions does the collective-oriented personality deviate from the moral teachings in a communal society?
Subjects: The Hutterites originated in Austria in 1529 as a Christian communal group practicing the teaching of "community of goods." Today their colonies are located in the agricultural areas of northwestern United States and Canada. The investigation will be carried out in Alberta, Canada, where about 60 colonies reside.

Methods: Formulation of the original charter or code of values of the Hutterite life. Determination of methods of character education in Hutterite colonies through study of the public schools in these colonies and observations of colony teaching agencies such as the kindergartens. Study of deviancy through interviews with persons who have left the colonies. Inductive type generalizations based upon empirical findings and observations in these colonies.
Duration: June 1962-September 1965.
Principal investigator: John A. Hostetler, Ph.D., Department of Sociology and Anthropology, Pennsylvania State University, University Park, Pa.
Cooperating groups: Pennsylvania State University; Office of Education, U. S. Department of Health, Education, and Welfare.

16-N-13 THE EFFECTS OF SOCIAL INTERVENTION AND GROUP TRAINING ON THE PERFORMANCE OF CHILDREN WHO COME FROM SUBCULTURAL BACKGROUNDS

Purpose: To see if intervention by various social agencies can be used to educate families who are below "average" socio-economically and to see the effects of such intervention upon children's subsequent performance in first three years of school. To see the effect of group training of children on their subsequent performance in school. To evaluate relative influences of social intervention and group training, combined or considered separately.
Subjects: 12 children, C.A. 3-0 to 5-6, selected from subcultural backgrounds, whose current functioning is below their potential because of cultural deprivation, and who are without apparent emotional or organic complications.
Methods: The term "subcultural" to be defined in terms of (1) a social worker's rating of the family's socio-economic status, and (2) a nutritionist's rating of the family's food intake. Child's intellectual and social functioning to be evaluated on various tests. Group training to be defined in terms of the structure and limits set by an occupational therapist and her assistant. Effects of social intervention and group training to be evaluated in terms of child's follow-up performance on the same tests as well as his school grades. During the first year, the experimental group will receive help from the nutritionist and social worker in home and group training. During the second year, these social agencies will continue to give individual help to families and the children will continue to receive group training with more controls being added. During the third year, all special help to the families will be terminated with only the children receiving group training. A matched control group will also be provided. It is hypothesized that children in the first and second year groups will perform better in school than those in the third year group because of the added help given to their families. The value of preschool training for the children in different experimental conditions can be assessed at the end of their third year in school.
Publication plans: Will publish results in psychology, education, and/or mental retardation journals as applicable.
Duration: July 1961-July 1964.
Principal investigators: Sidney I. Dean, Ph.D., Chief Psychologist, and Garret H. Yanagi, Ph.D., Staff Psychologist, Mental Retardation Division, Hawaii State Department of Health, P. O. Box 3378, Honolulu, Hawaii.

16-N-14 STUDY OF EXPERIENTIAL AND ENVIRONMENTAL MENTAL STIMULATION OF LOWER CLASS PRESCHOOL CHILDREN

Purpose: To study mental environment of urban, lower class, preschool children. Study attempts to investigate specific resources of mental stimulation in the homes of families of three economic levels in order to describe more specifically the ties between social and cultural environments and mental growth of children.
Subjects: Three groups of 50 families each--one group chosen from a slum area; one from a more stable working class section; and one from a professional-managerial, upper-middle class residential district.
Methods: Collection of data will proceed via structured interviews, observation of home environments, and standardized stimuli depicting parent-child situations. Information will be collected on: daily activities, physical facilities, televiewing and radio-listening frequency

and content, play resources, literature resources, and out-of-home activities of the child, background, occupation, and education of the parent, their aspirations for the child, and language modes and usage for communication in the home. Quality, variety, and quantity of children's experiences in these homes will be examined. Data will be analyzed for range and level of resources for mental stimulation and growth within each economic group. The three groups will be compared to determine extent of difference between the economic levels. Inferences will be drawn for preschool programs to provide appropriate stimulation for culturally deprived preschool children.
Duration: June 1962-May 1965.
Principal investigators: Robert D. Hess, Ph.D., Chairman, and Mrs. Patti Gregory Kemper, Research Assistant, Committee on Human Development, University of Chicago, Chicago 37, Ill.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-K-15 THE POLITICAL SOCIALIZATION OF ADOLESCENTS

Purpose: To explore the processes, social and psychological, by which the adolescent (1) chooses a political party with which to identify his loyalties; (2) chooses or does not choose to participate in the "political" activities in the high school; and (3) becomes interested in politics, with reference to his wider environment.
Subjects: All students in 10 high schools in Illinois and their parents and teachers.
Methods: The students completed schedules in the fall of 1957, and again in the spring of 1958. Some of them were again contacted in the spring of 1962. Parents and teachers were contacted in the fall of 1957. In addition to the usual survey data, complete sociograms are available for each school at the two points in time.
Findings: The major finding so far deals with the role of the peer group in influencing party choice over and above that of the family which is, of course, the most important single source of political influence. One very surprising finding is the greater influence on political party choice exerted by the mother on adolescents of both sexes.
Publication references and plans: Public Opinion Quarterly 25: 596-606, winter 1961; forthcoming dissertation.
Duration: 1960-1963.
Principal investigator: Martin L. Levin, Ph.D. Candidate, Department of Social Relations, Johns Hopkins University, Baltimore, Md.
Cooperating group: For original collection of data, Office of Education, U. S. Department of Health, Education, and Welfare.

16-K-16 VOCATIONAL DEVELOPMENT IN ADOLESCENCE

Purpose: To measure and determine the correlates of vocational maturity.
Subjects: 5,000 pupils in grades 5-12 in Cedar Rapids, Iowa.
Methods: Data were gathered with a questionnaire called the Vocational Development Inventory and were analyzed by various statistical techniques.
Findings: There are systematic differences in the vocational behavior of younger and older adolescents which indicate that vocational behavior does mature.
Publication plans: Journal articles and a monograph.
Duration: January 1962-December 1964.
Principal investigator: John O. Crites, Ph.D., Assistant Professor of Psychology, State University of Iowa, Iowa City, Iowa.
Cooperating group: Cedar Rapids School System.

16-K-17 UNWED MOTHERHOOD: BACKGROUND AND SOCIAL CONSEQUENCES

Purpose: To study a number of background and situational characteristics of unwed mothers and to investigate some of the personal and social consequences of the pregnancy on her and the

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child. The following are illustrative of the types of variables to be included: education of subject and her parents, occupation, place of residence, race, marital status of parents, characteristics of the father, feelings of guilt or shame, effect on her educational, occupational, and marital plans, relationships with family and peers, placement of the child, and attitude toward the child.
Methods: Three sources of data will be utilized: case materials from two maternity homes over a span of three to six months prior to the birth; questionnaires from physicians and their unwed patients during pregnancy; survey data from unwed mothers selected from birth registration records.
Duration: 1961-1963.
Principal investigators: Charles E. Bowerman, Ph.D., Professor of Sociology and Research Professor, Donald P. Irish, Ph.D., Research Associate, and Hallowell Pope, M.A., Research Associate, Institute for Research in Social Science, University of North Carolina, Chapel Hill, N. C.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-W-18 A COMPARISON OF THE SOCIAL EXPERIENCE AND DEVELOPMENT OF CHILDREN BORN IN- AND OUT-OF-WEDLOCK

Purpose: To determine whether in a group of homogeneous social class, differences can be found in the development and social experiences of children born in- and out-of-wedlock.
Subjects: 353 Negro infants, born in Kings County Hospital, 1956-1959, with birth weights of 2,100 grams or less and discharged alive. One third were born out-of-wedlock.
Methods: Determination of mother's marital status was made at the time of delivery. Information on social experience was obtained by parental interviews when child was 12 months and 30 months of age. Eight developmental examinations were given to each child in the first three years of life. Appropriate statistical comparisons were made of the social scores and the developmental scores of the children of married and unmarried mothers.
Findings: While all data have not been yet analyzed, it seems probable that it will be found that the social experiences of both groups are analagous and relate to social class rather than to mother's marital status.
Publication plans: To be presented at American Orthopsychiatric Association meeting, 1963.
Duration: October 1956-September 1963.
Principal investigators: Alfred M. Freedman, M.D., Professor and Chairman, Helen Wortis, M.S., Assistant Professor, and Rhoda Cutler, M.S., Assistant Instructor, Department of Psychiatry; Caryl Heimer, M.D., Assistant Professor, Department of Pediatrics; New York Medical College-Flower and Fifth Ave. Hospitals, New York 29, N. Y., and Martin D. S. Braine, Ph.D., Research Associate, Clinical and Social Psychology, Walter Reed Army Medical Center, Washington, D. C.

HEALTH SERVICES AND SURVEYS

16-X-1 EFFECT OF HOME CARE ON A LOW INCOME POPULATION

Purpose: To determine whether and to what extent provision of medical care for acute physical illnesses through the primary vehicle of home visiting is associated with consequences to the health and welfare of the population served. Particular emphasis is placed on home care in acute illnesses especially among children.
Methods: In a first phase, data are being collected on how families in a large public housing project come into contact with and receive services from the various medical care facilities and health personnel in the community. A random sample is used and open-ended inquiries are made of respondents with the help of an interview guide. Later phases will attempt to isolate behavior and indices associated with home care using more quantitative methods and appropriate comparison groups.
Duration: 1962-not reported.
Principal investigators: Count D. Gibson, Jr., M.D., Professor and Chairman, and Bernard M. Kramer, Ph.D., Assistant Professor, Department of Preventive Medicine, Tufts University School of Medicine, 25 Bennet St., Boston 11, Mass.
Cooperating group: National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-X-2 APPLICATION OF PREVENTIVE CONCEPTS OF MENTAL HEALTH BY A PUBLIC HEALTH NURSE IN MATERNAL-CHILD NURSING

Purpose: Basic assumptions: (1) Pregnancy is a stressful period in a woman's life. The manner in which the mother solves her problems has an important bearing upon future mother-child relationships and the well-being of the entire family. (2) Pregnancy is a period during which the woman is more responsive to emotional support. (3) There is a lack of specific information concerning the knowledge and skills needed by the public health nurse in a mental health capacity in maternal and child nursing services. Purpose of the project is to determine what knowledge and skills are needed by the public health nurse to promote good mental health in mothers and children and to prevent emotional disorders during pregnancy and during the first two years thereafter. The focus of the project is upon: documenting the facts that a public health nurse works with both reality and emotional problems in maternal-child nursing, differentiating the reality problems from the emotional problems, determining which problems the nurse recognizes and those which she fails to recognize, and determining what action the nurse takes in relation to the problems she recognizes.
Duration: January 1962-January 1965.
Principal investigators: Elwyn N. Akers, M.D., Chief, Maternal and Child Health Section, and staff, Colorado State Department of Public Health, 4210 E. 11th Ave., Denver 20, Colo.
Cooperating groups: University of Colorado Medical Center; Grant Foundation.

16-X-3 PRENATAL CARE ATTITUDES AND PRACTICES

Purpose: To probe further into the questions: why many women of low socio-economic status are not more strongly motivated to utilize a neighborhood health service; in what ways these women differ from others of similar background who are highly motivated toward prenatal care.
Subjects: 300 consecutive maternity patients at Philadelphia General Hospital, living in eight census tracts in West Philadelphia, mostly Negro. Of the 300, 66 percent had attended the prenatal clinic at the Hospital; 14 percent had attended a neighborhood clinic; 19 percent attended no clinic.
Methods: Hospital records of all subjects were examined to determine the distribution of mothers with respect to age, parity, residence, and clinic attendance. Structured interviews with 45 mothers were conducted to investigate health attitudes; availability of services ("psychologically" as well as geographically); satisfaction with services; structure of household, occupation and education of mother and of father if he was a member of the household, and length of residence in Philadelphia.

Publication references: Mimeographed report, July 1962, available from Health and Welfare Council, Inc., $1.00.
Duration: 1961-July 1962.
Principal investigator: Dr. Mary W. Herman, Research Associate, Health and Welfare Council, Inc., 1617 Pennsylvania Blvd., Philadelphia 5, Pa.
Cooperating groups: Maternal and Child Health Section, Philadelphia Department of Health; Philadelphia General Hospital; Dolfinger-McMahon Foundation.

16-X-4 PARENTAL AND PATIENT BELIEFS ABOUT RHEUMATIC FEVER AND THE PREVENTION OF RECURRENCES

Purpose: In spite of knowledge and means of preventing recurrences of rheumatic fever, many patients fail to come for prophylaxis regularly. This study is designed to discover whether this is related to the families' understanding about the nature of rheumatic fever and its prevention.
Subjects: Children, adolescents, and young adults attending the Rheumatic Fever Clinic at University Hospitals in Cleveland, and their parents.
Methods: Interviews with parents and patients to find out background and beliefs. Review of hospital records. Study of attendance records.
Findings: Preliminary: poor understanding of what rheumatic fever is and what prophylactic bicillin does. Great concern about the heart. Tendency of parents to overcontrol and over-restrict children under 12 years of age. Attendance up to 12 years, fair; after 12 years, poor.
Publication plans: In pediatric or psychiatric journals.
Duration: July 1962-1964.
Principal investigator: John H. Kennell, M.D., Associate Professor of Pediatrics, Western Reserve University School of Medicine, 2109 Adelbert Rd., Cleveland 6, Ohio.
Cooperating group: Cleveland Area Heart Society.

16-X-5 THE ROLE OF THE PHYSICIAN IN MAJOR CHILDHOOD ILLNESS: A PILOT STUDY

Purpose: To investigate physicians' attitudes and reported practices in communication with parents when they diagnose a fatal or long-term illness in a child. This investigation is a preliminary phase of a planned study of physician-parent interactions occasioned by fatal and long-term childhood illnesses.
Subjects: Pediatricians and family physicians.
Methods: The major method currently planned consists of a depth interview focused around several example situations which a physician might encounter in his practice. The interview is designed to elicit responses concerning the way the diagnostic scene would be approached by the physician and the estimated contacts he might have with parents in regard to informing them concerning the nature of the illness, and giving them advice and emotional support.
Publication plans: Will be submitted for publication when completed.
Duration: August 1962-July 1963.
Principal investigator: Norman B. Gordon, Ph.D., Associate Professor of Psychology, Graduate School of Education, Yeshiva University, 110 W. 57th St., New York 19, N. Y.
Cooperating groups: Albert Einstein College of Medicine, Yeshiva University; Public Health Service, U. S. Department of Health, Education, and Welfare.

16-X-6 PLEOPTIC-ORTHOPTIC HOSPITAL UNIT

Purpose: A Pleoptic-Orthoptic Hospital Unit is proposed to offer the most recently acquired techniques of treatment of amblyopia and strabismus to patients of all income groups and all geographical areas. A randomized clinical study will be carried out to evaluate statistically the effectiveness of such treatment. A comparison of results obtained will aid physicians and hospital administrators in the future to plan adequate facilities in their communities for the best treatment of these common handicaps.

Subjects: Children, age 5 to 18 years.
Methods: Pleoptic treatment after Professors Bangerter and Cupper; orthoptic treatment.
Duration: November 1962-November 1968.
Principal investigators: Mary C. Fletcher, M.D., Assistant Professor of Ophthalmology and Pediatrics, and Louis J. Girard, M.D., Head, Division of Ophthalmology, Baylor University College of Medicine, 1200 M. D. Anderson Blvd., Houston 25, Tex.
Cooperating group: Methodist Hospital (Houston).

16-X-7 PSYCHOLOGICAL AND PSYCHIATRIC EVALUATION IN BURNS

Purpose: To evaluate short- and long-term response of the burned child as it relates to immediate care and long-term rehabilitation.
Subjects: Approximately 50-60 severely burned children treated yearly.
Methods: Tests and evaluation by psychologist, psychiatrist, and clinical staff.
Publication references: Army reports of Dr. T. G. Blocker.
Duration: 1960-1970.
Principal investigators: Stephen R. Lewis, M.D., Associate Professor of Surgery and Chief, Division of Plastic Surgery, and Harold A. Goolishian, Ph.D., Associate Professor and Chief, Division of Psychology, University of Texas Medical Branch, Galveston, Tex.

16-X-8 SPECIAL PROJECT WITH EPILEPTICS

Purpose: A study project to provide for the medical, vocational, and social rehabilitation needs of young inmates with epilepsy and related neurological disorders. It is anticipated that the project will demonstrate how these inmates may be treated in the institutional setting in preparation for their eventual return to the community.
Subjects: 30 young inmate patients, 16 to 25 years of age, drawn from the Department of Correction Reception Center at Elmira and from other State correctional institutions, housed in a special facility and replaced as they are paroled or otherwise released.
Duration: December 1960-1965.
Principal investigators: Hyman Pleasure, M.D., R. Beecher, R. A. Dansereau, and staff, New York Vocational Institution, West Coxsackie, N. Y. (Reported in *Current Projects in the Prevention, Control and Treatment of Crime and Delinquency*, 1962.)
Cooperating group: New York State Department of Correction.

16-X-9 COMPREHENSIVE CARE OF CHILDREN WITH MULTIPLE HANDICAPS

Purpose: A research inquiry into: (1) the existing status of medical, paramedical, and community facilities for children with single and multiple handicaps; (2) development of techniques for optimum outpatient use of these facilities for rehabilitation of the handicapped child; (3) development of standards and guides for an integrated pattern of care; and (4) development of realistic goals for the treatment and rehabilitation of the handicapped child.
Subjects: Children with one or more handicapping conditions. A pilot project limited to children with visual, auditory, and speech defects has begun. Inclusion of children with other handicapping conditions is planned for the future.
Methods: Each patient is examined by the pediatrician and other appropriate specialists. Baseline audiograms, refractions, psychological testing, and laboratory studies are performed on each patient; other studies are performed as indicated. The patients are discussed individually at a team conference to plan further work-up and care. Long-term follow-up of each case is planned.
Publication plans: A final report will be submitted to the Health Research Council of New York City. These results will probably be published.
Duration: January 1962-December 1966.

Principal investigators: Horace L. Hodes, M.D., Director, Department of Pediatrics and Robert S. Siffert, M.D., Director, Department of Orthopedics, Mount Sinai Hospital, New York 29, N. Y. (Reported by Malcolm H. Moss, M.D., Director, Pediatric Comprehensive Care Clinic, Mount Sinai Hospital.)
Cooperating group: Health Research Council of New York City.

16-X-10 ALAMEDA COUNTY MENTAL HEALTH STUDY

Purpose: To ascertain unmet service needs and resources for the care of mentally ill, mentally retarded, and alcoholic persons in Alameda County; to obtain a treatment census of persons over and under 18 years under care during a given period at psychiatric resources in the community and of private practitioners in mental health fields; to make estimates of prevalence in the fields of study; to learn about barriers to utilization of existing services and guidelines for planning essential services and more effective utilization of services.
Subjects: Children, adolescents, and adults in the populations at risk. Professional personnel in mental health fields and their deployment in the county under study.
Methods: Analysis of existing demographic data; collection and analysis of service statistics; interviews with staff members in psychiatric resources and in nonpsychiatric community resources which serve the populations at risk or make referrals; self-surveys of school programs for mentally retarded and emotionally disturbed children, including data on special schools, special classes, testing, counseling, and guidance services; information from public welfare departments, public health departments, and community mental health programs. Mailed questionnaires to psychiatrists, nonpsychiatric physicians, psychologists, and social workers.
Publication plans: A report will probably be released by sponsoring agencies--Alameda County Mental Health Association and Council on Social Planning--in June 1963, with recommendations by the Study Commission. Articles will be submitted to medical, public health, and mental health journals.
Duration: May 1962-June 1963.
Principal investigator: Irving Babow, Ph.D., Study Director, Alameda County Mental Health Study, 7337 13th St., Oakland 12, Calif., and Lecturer, University of California School of Social Welfare, Berkeley, Calif.
Cooperating groups: National Mental Health Act funds made available through California State Department of Mental Hygiene.

16-X-11 PRINCIPLES AND PROBLEMS IN THE APPLICATION OF FAMILY PSYCHOTHERAPY IN A CHILD GUIDANCE CLINIC

Purpose: To delineate clinical and theoretical problems in the application of family psychotherapy in a child guidance clinic.
Subjects: Families attending a psychiatric clinic in the setting of a general children's hospital.
Methods: Descriptive at first; other methods not yet worked out.
Publication references: Preliminary paper presented to Psychiatric Social Work Section of National Association of Social Workers, Northern California Branch, October 1962.
Duration: January 1962-1965.
Principal investigator: Kent A. Zimmerman, M.D., Director, Child Guidance Services, Children's Hospital of the East Bay, Oakland 9, Calif.

16-X-12 EVALUATION OF THE EFFECTS ON CHILDREN OF DELIBERATE INHALATION OF FUMES OF PLASTIC CEMENT

Purpose: (1) To evaluate possible toxic organic effects of "glue-sniffing"; and (2) to evaluate social and emotional factors related to this practice.
Subjects: Children known to be involved in the practice of glue-sniffing.

Methods: Glue-sniffers are subjected to physical examination, laboratory procedures, psychological testing, psychiatric evaluation, and social work interviews with parents.

Publication references: *Journal of the American Medical Association* 181: 300, July 28, 1962.

Duration: November 1961-July 1963.

Principal investigators: O. N. Massengale, M.D., Instructor in Pediatrics, and Helen H. Glaser, M.D., Assistant Professor of Pediatrics, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

Cooperating groups: Denver Juvenile Hall; Division of Maternal and Child Health, Colorado State Department of Health (utilizing funds made available by the Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare).

SOCIAL SERVICES AND SURVEYS

16-Y-1 ATTITUDES OF WHITE ADULTS TOWARD THE ADOPTION OF CHILDREN

Purpose: It is proposed that an earlier study "Attitudes of Negro Adults Toward the Adoption of Children" (Bulletin 12, Research Relating to Children), be extended to include white respondents.
Subjects: About 400 white respondents who are partners in intact marriages in which each partner is between the ages of 25 and 50, where there is either no child or only one child over the age of five, living in areas which are suburbs of Washington, D. C.
Methods: Respondents interviewed in their homes. An interview guide will be utilized in gathering the following data: perceptions of children available for and persons interested in adoption, knowledge of adoptive parents and of their experiences, knowledge of adoption agencies, their requirements, practices and procedures, and assessments of agency operations, responses of those interviewed to the idea of their adopting a child as a means of enlarging their own families, characteristics of a child they would be interested in adopting, etc. Analysis would consist not only of systematic internal comparison of cases drawn from this study but also of comparisons of data from white respondents with data already collected from Negro respondents.
Duration: June 1962-May 1963.
Principal investigator: Leila Calhoun Deasy, Ph.D., Associate Professor and Director of Research, National Catholic School of Social Service, Catholic University of America, Washington, D. C.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-2 STUDY OF ADOPTED CHILDREN

Purpose: To determine whether there are any central identifiable characteristics of adopted children who are referred to a child guidance clinic.
Subjects: Cases selected from clinic files.
Methods: Investigation of possible characteristic differences in the case histories of these adopted children, formulation of categories from these initial hunches which could later be quantified.
Publication plans: Nothing definite; often, material at this clinic is mimeographed.
Duration: Spring 1962-indefinite.
Principal investigators: Vita Krall, Ph.D., Staff Psychologist, Jerome J. Schiller, Ph.D., Chief Psychologist, and Elwyn Smolen, M.D., Director, Child Guidance Clinic of Greater Bridgeport, Inc., 1081 Iranistan Ave., Bridgeport, Conn.

16-Y-3 EMOTIONAL PROBLEMS IN ADOPTED CHILDREN

Purpose: Comparison of adopted children having emotional problems with: (1) nonadopted, emotionally disturbed children; and (2) adopted, nonemotionally disturbed children.
Subjects: Patients in Los Angeles psychiatric settings and volunteers from adoption agencies.
Methods: Questionnaires, group intelligence tests, medical and psychological diagnosis, and case history data.
Findings: Higher percentage of adoptees with emotional disturbances than expected from general population. Adoptees demonstrated more aggressive acting-out and sexual acting-out, less enuresis, more alcoholism, and more suicide attempts. Age at placement, type and length of original adoptive placement do not appear significant.
Publication plans: American Journal of Orthopsychiatry.
Duration: January 1961-January 1963.
Principal investigators: Marshall D. Schechter, M.D., Paul V. Carlson, Ph.D., Instructor in Medical Psychology, James Q. Simmons, M.D., and Henry H. Work, M.D., Head, Division of Child Psychiatry, Neuropsychiatric Institute, University of California, Los Angeles 24, Calif.
Cooperating groups: University of California; adoption agencies; private physicians.

16-Y-4 FOLLOW-UP STUDY ON PARENTS WHO ADOPTED OLDER CHILDREN

Purpose: To determine the problems and satisfactions resulting from the acceptance, for adoption, of white, normal children five years of age and older at the time of placement.
Subjects: 100-120 adoptive couples.
Methods: Data on the stress and satisfaction resulting from such adoptions will be obtained through direct interviews with the parents, a review of the records and the use of a Q-sort completed by the parents.
Duration: June 1962-May 1964.
Principal investigator: Alfred Kadushin, Ph.D., Professor of Social Work, University of Wisconsin, Madison, Wis.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-5 THE STUDY OF ADOPTIONS OF GREEK CHILDREN BY AMERICAN FOSTER PARENTS

Purpose: To study the outcome of approximately 500 proxy adoptions of Greek children into American foster homes, in order: (1) to determine the children's present emotional and physical conditions; (2) to evaluate the adoptive home life and care which they have received, and (3) to arrive at general and theoretical conclusions, useful to agencies dealing with adoptions.
Methods: Researcher will familiarize himself with existing records of the Greek-American adoptions, survey the relevant literature on American adoption theory and practice, consult with personnel of the Children's Bureau who are concerned with adoption, interview a number of foster parents of Greek children in order to explore the range of data, the foster parents' reactions to being interviewed, and to develop systematic interviewing techniques and schedules suitable to the larger research.
Duration: July 1962-June 1963.
Principal investigators: Vera Rubin, Ph.D., Director, Research Institute for the Study of Man, 162 E. 78th St.; John Andromedas, Ph.D. Candidate, Lambros Comitas, Instructor in Anthropology, and Conrad M. Arensberg, Ph.D., Professor of Anthropology, Columbia University; New York, N. Y.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-6 INSTITUTIONAL PHILOSOPHY, PRACTICE, AND STRUCTURE CONDUCIVE TO RESTORATION OF FAMILY LIVING FOR THE CHILD

Purpose: To examine quantitative and qualitative data concerning the relationship between organizational philosophy, practice, and structure of approximately twenty children's institutions in the Southeast and the success of these institutions in obtaining restored family living for the children included in their caseloads. "Restored family life" may include return to a rehabilitated family, placement with hitherto unavailable relatives, adoption arrived at with the parent's active participation, or the strengthening of the child's ties with his family while he remains in group care.
Subjects: Majority of the institutions will be members of the Group Child Care Project of the University of North Carolina, a number of which have accepted restoration of each child to family living as an organizational goal.
Duration: June 1962-May 1963.
Principal investigators: Alan Keith-Lucas, Ph.D., Research Professor of Social Work, and Hansel H. Hollingsworth, M.S.S.W., Lecturer in Social Work, Institute for Research in Social Science, University of North Carolina, Chapel Hill, N. C.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-7 FOSTER PARENT ATTITUDES RELATED TO PLACEMENT SUCCESS

Purpose: No greater challenge faces the child welfare worker than the placement and maintenance of a child in a foster home. Difficulties in placement and frequencies of placement failure are greatly compounded in the case of the emotionally disturbed child. Present research was motivated and formulated in the context of a foster home program associated with a residential treatment center for children. Fruitful preliminary work, conducted in this setting with a small number of subjects, which concerned relations between foster parent attitudes and the success of placement served as the basis of the hypotheses presently being tested with a larger population. A questionnaire is being developed which obtains basic personal data, as well as projective content. It is the long-term objective of this study to further develop questionnaire method as a means of obtaining public opinion concerning foster home placement, as well as facilitating the service functions of recruiting and selecting foster parents, matching them with appropriate children, and identifying areas of potential conflict in need of preplacement casework. While striving toward these goals, a considerable amount of significant data is being accumulated which relates to specific parental needs and the success and failure of placement.
Duration: 1962-1964.
Principal investigators: Ralph W. Colvin, Ph.D., Director of Research and Psychological Services, and staff, Astor Home for Children, Rhinebeck, N. Y.; Anne M. Ritter, Ph.D., Director of Psychological Services, and staff, Kennedy Child Study Center, 149 E. 67th St., New York 21, N. Y.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-Y-8 SELECTION OF FOSTER PARENTS FOR DISTURBED CHILDREN

Purpose: To develop measures that will differentiate "successful" from "unsuccessful" foster home environments in terms of ability to handle the 6 to 11 year old disturbed foster child. The potential discriminative items are expected to be found in some aspects and characteristics of the general social and interpersonal attitudes, family structure and occupational orientation of the foster family.
Subjects: Examples of groups from which the criteria are intended to be derived are: (1) homes from which a child has been removed because of the foster parents' inability to cope with the behavior of the child; (2) a highly agency-selected and self-selected group of foster parents who are attending, or have attended, an intensive group education program on foster child care, etc.
Methods: Social worker ratings of foster homes and a pool of potential predictor items derived from a number of existing social attitude and personality scales. The social worker ratings of foster homes will be factor analyzed and factor scored. Discriminative items will be selected on the basis of significant differences among the known groups and factor scores derived from the analysis of the social worker ratings of foster homes.
Duration: June 1962-May 1964.
Principal investigators: Thomas J. Banta, Ph.D., Assistant Professor of Psychology, University of Wisconsin, and Wilbur J. Schmidt, Director, Wisconsin State Department of Public Welfare, 275 State Office Bldg., Madison, Wis.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-9 DEMONSTRATION PROJECT ON THE TRAINING OF NONPROFESSIONAL PERSONS FOR LICENSING DAY CARE AND INDEPENDENT FOSTER HOMES

Purpose: To study how effectively a nonprofessional person can be trained within a short period of time to license foster day care and independent foster homes for a state agency with responsibility for licensing such homes. A secondary purpose is to demonstrate the usefulness of cooperation in a training program for nonprofessional workers between a division of child welfare in a state agency and a school of social work through a short, carefully structured course.

Methods: Some evaluation is necessitated in the determination of the successfulness of the workers in their agency after the training course is over. Two possibilities of examining this will be used, both based on subjective judgments. The records prepared by the workers after training and their evaluation of the homes for licensing will be compared by the agency supervisor to previous agency records and performance of other workers, and an evaluative instrument for rating the adequacy of the records will be applied by two independent judges.
Duration: June 1962-May 1963.
Principal investigators: Jennette R. Gruener, Ph.D., Professor, and Mrs. Lela B. Costin, M.S.W., Assistant Professor, Jane Addams Graduate School of Social Work, University of Illinois, Urbana, Ill.
Cooperating groups: Department of Children's Services, Illinois State Department of Mental Health; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-10 THE OUTCOMES OF DAY CARE

Purpose: A two-year project to examine the effect of a social factor--day care--by reliably establishing the relationship between day care and its outcomes. To establish the relationship between type, quality and use-time of day care, and (1) physical, (2) social, (3) psychological adjustment of child and family. Expected results: (1) theoretic findings on the nature and direction of the central relationship; (2) a practice- and policy-oriented evaluation of such issues as adequacy of day care, critical episodes in day care, success of placement, and placement factors and critical separation situations.
Subjects: An estimated 400 children and their families using day care, matched by 400 other children and their families not using day care. Sample controlled by maturation level of child, type and quality of day care, demographic and socio-economic factors.
Methods: Children and their families are empaneled according to control factors for day care. Control group is frequency-matched. Assignment to study panel follows diagnostic work-up by physicians, social workers and related professionals. Criterion measurement is followed by three "after" measurements. Statistical analysis of cross-sectional data and longitudinal analysis of data on children in day care.
Duration: June 1962-May 1963.
Principal investigator: Genevieve W. Carter, Ph.D., Associate Executive Director, Welfare Planning Council, Los Angeles Region, 733 1/2 S. Hope St., Los Angeles 17, Calif.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-11 A FAMILY-CENTERED TREATMENT RESEARCH AND DEMONSTRATION PROJECT WITH DEPENDENT MULTIPROBLEM FAMILIES IN PUERTO RICO

Purpose: To develop techniques for family-centered social work treatment of dependent multiproblem families in Puerto Rico. To ascertain the effects of severe emotional, social and physical long-term disabilities among the members of these dependent multiproblem families and to determine if these disabilities are related to the dysfunction of the whole family as a household unit. To identify the origin of the specific disabilities in each household and to develop ways to cope with them. To evaluate the changes occurring among the dependent multiproblem families in the experimental and control segments in order to determine whether they may be ascribed to the family-centered social work treatment.
Subjects: From universe of 555 recipients of child welfare services for five or more consecutive years in San Juan, Puerto Rico, random sample of 240 cases will be randomly assigned to four segments of 60 cases each.
Methods: Research phase will be based on an extended control group design with an experimental segment and three control segments in a "before-after" study. The experimental variable will be the family-centered social work treatment. This variable will be introduced to experimental segment and control segment II, with the difference that the subjects of experimental segment will be measured before exposure to the experimental variable but not so with the subjects of control segment II. The exposure to the experimental variable shall last for approximately two years.

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Duration: 1962-1964.
Principal investigators: Rosa C. Marin, D.S.W., Professor of Social Work Research and Director, Research Unit, and Maria Elisa Díaz Miranda, Professor of Social Work, and staff, University of Puerto Rico, Rio Piedras, P. R.
Cooperating group: Welfare Administration, U. S. Department of Health, Education and Welfare.

16-Y-12 RESEARCH DEMONSTRATION WITH DEPENDENT MULTIPROBLEM FAMILIES

Purpose: The project will provide intensive casework services in a public welfare department within a framework of organized interagency collaboration. It will attempt: to secure improvement in the adequacy of family functioning among a sample of multiproblem families as operationally defined; to measure the changes made using three different sets of predefined measures; to compare the changes made with those made by a control group of families selected from the same population, to whom the special project services will not be offered; and to analyze, within the demonstration group, factors which appear to be associated with a substantial degree of improvement as measured by the project criteria.
Subjects: During the first year, the public assistance caseloads were screened for families which met the project's operational definition of dependent multiproblem family, and from this population the control and experimental group samples were randomly drawn.
Methods: Material from case records and research interviews was systematically prepared for the "before" case summaries to enable eventual measurement of change using the Family Evaluation Schedule and the Movement Scale. Demonstration group cases were then transferred to the intensive casework demonstration unit, which began assuming cases in November 1961. Other instruments, including case logs for recording certain dimensions of the casework, were developed and put into operation.
Duration: June 1961-1964.
Principal investigators: David Wallace, Ph.D., Director, Social Research Service, State Charities Aid Association, 105 E. 22nd St., New York 10, N. Y.; Frederick G. Kelly, M.S.S., Executive Director, Chemung County Council of Community Services, and Kenneth Y. West, Commissioner of Public Welfare, Chemung County, Elmira, N. Y.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-13 NEIGHBORHOOD IMPROVEMENT PROJECT

Purpose: An experimental, demonstration, and research project to attempt the reduction and eventual prevention of family disorganization and its correlates, adult disordered behavior, and juvenile delinquency, in one neighborhood of highest delinquency in the city of New Haven.
Methods: (1) Intensive, reaching-out, family-centered casework treatment to the most disorganized, multiproblem families whose children are "in clear and present danger" due to neglect or social delinquency; (2) total neighborhood treatment by a comprehensive group work and recreational program designed to reach all age groups and geared to the special needs of each group; (3) a coordinating program designed to bring community services more fully to bear on the needs of the population served, to educate that population to a fuller use of resources, to find existing gaps in services, and to help the community fill these gaps; (4) evaluation of changes resulting from the services given; and (5) study aimed at the early identification of multiproblem families with a group of relatively stable families of comparable socio-economic background.
Publication references and plans: *Social Casework* 42:3:124-127, March 1961; *Social Work* 6:4: 50-56, October 1961; *Marriage and Family Living* 24:1:51-56, February 1962; paper presented at American Sociological Association meeting, September 1962; etc. Two monographs, one describing the total project with a report on evaluation research, are planned.
Duration: September 1960-September 1964.
Principal investigators: Jane Krisberg, Director, and Ludwig L. Geismar, Ph.D., Research Director, Council of Social Agencies, 210 Hamilton St., New Haven 11, Conn. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, 1962.)

16-Y-14 SELECTED CHARACTERISTICS OF FAMILY AGENCY CLIENTS WITH MENTAL AND PARENT-CHILD PROBLEMS IN THE TWIN CITIES

Purpose: To identify the extent to which parent-child problems are associated with mental problems in families in the open caseload of the Minneapolis Family and Children's Service and the St. Paul Family Service.
Subjects: 434 active cases of the two agencies where both parents and at least one child under 19 are in the home.
Methods: Questionnaires (one per case) filled out by the caseworker in whose caseload subject cases fall. Analysis through Chi-square and percentage comparisons.
Findings: Parent-child and mental problems tend to be associated with each other to a high degree. Parent-child problem families and families with both problems tend to have more children and more teenagers, older children, and be in a more advanced step of family development than families with mental problems only. All families are similar with reference to socio-economic status.
Publication plans: Mimeographed report.
Duration: December 1961-June 1962.
Principal investigator: Werner W. Boehm, D.L., Professor, School of Social Work, University of Minnesota, Minneapolis 14, Minn.
Cooperating groups: St. Paul Family Service; Minneapolis Family and Children's Service.

16-Y-15 THE PARENT'S CONCEPT OF THE FAMILY IN RELATION TO FAMILY TREATMENT AND ADJUSTMENT

Purpose: To investigate effects of treatment on the family concepts of the parents of clinic families, and their relationship to family adjustment.
Subjects: Three groups of 20 families: a treatment group of families referred to a guidance center having problems with one of their children; a control group of families in the community with a child who is high in adjustment; a control group of community families with a child who is low in adjustment.
Methods: Administration over time of a Family-Concept Q-sort and other related measures at several treatment points. Control group families tested at equivalent times.
Findings: To date, positive findings on the family-concept measures, sharply differentiating between the guidance center group and the high adjustment group.
Publication plans: Journal publication and informal distribution.
Duration: 1961-1965.
Principal investigator: Ferdinand van der Veen, Ph.D., Clinical Psychologist, Dane County Guidance Center, 2059 Atwood Ave., Madison 4, Wis.

16-Y-16 THE ROLE OF THE SOCIAL WORKER IN A CHILD PROTECTIVE AGENCY

Purpose: To study the tasks, role performance, and skills of social workers providing protective services to children who are neglected or abused, and whose parents are unable or unwilling to provide the necessary care and protection for their children.
Subjects: 65 professional caseworkers in 18 district offices covering all parts of the state, employed by Massachusetts Society for the Prevention of Cruelty to Children.
Methods: Study aims to tap the experience of child protective workers so as to provide some systematic understanding of how they spend their time, skills utilized, and how they feel about it. It is proposed to relate these findings to certain personal data gathered from these workers including their social characteristics, background, training, experience, attitudes, aspirations, and professional orientation. Analysis of written reports, administration and analysis of questionnaires, focused interviews, direct observation.
Duration: June 1962-May 1963.
Principal investigators: Robert M. Mulford, M.S.S.W., General Secretary, and Andrew Billingsley, M.A., Research Associate, Massachusetts Society for the Prevention of Cruelty to Children, 43 Mt. Vernon St., Boston 8, Mass.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-17 HOMEMAKER SERVICE DEMONSTRATION PROJECT FOR SERIOUSLY NEGLECTED ADC FAMILIES

Purpose: To teach mothers who are receiving ADC assistance and have been identified as chronic neglect cases by the Los Angeles County Bureau of Public Assistance, the basic principles and techniques of child care and home management through the use of homemakers as teacher, guides and counsellors. Objective is to prevent further family disintegration and child neglect, thus eliminating need for institutional care and court action.
Subjects: Approximately 212 persons in 40 families in the first year.
Methods: Twelve homemakers will provide approximately 15,840 hours of training in the home to this group of prejudged incompetent mothers and their neglected children.
Duration: June 1962-May 1963.
Principal investigators: James H. Campbell, M.A., Executive Director, Homemaker Service of Los Angeles Region, Inc., 340 N. Larchmont Blvd., and Genevieve W. Carter, Ph.D., Associate Director, Welfare Planning Council, Los Angeles Region, 733 1/2 S. Hope St., Los Angeles, Calif.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-18 A STUDY OF THE AID TO DEPENDENT CHILDREN PROGRAM OF MONTGOMERY COUNTY, OHIO

Purpose: (1) To develop a further understanding of the ADC family--the physical conditions under which they live, the caretaker's outlook on life, and the impact of these attitudes on the family's physical environment; and (2) to explore means whereby casework treatment can be made more effective.
Subjects: 400 ADC families selected from the files of the Montgomery County Welfare Department.
Methods: A 65-item coded questionnaire was forwarded to each of the subjects and, when returned, was matched to existing data in the Welfare Department files. Of the 332 questionnaires which were returned, 32 were randomly discarded and the remaining 300 were retained for the final study. Analysis of data using a 104-item schedule was directed toward identification of general characteristics of the typical ADC mother, child, father, stepfather (if any), and family living conditions and resources. Other analyses were directed toward the attitudes, opinions, and community behavior of the subjects. A second stage to explore means for increased casework effectiveness is in progress and results should be available in June 1963.
Duration: March 1961-June 1963.
Publication references: Mimeographed report available from Montgomery County Welfare Department.
Principal investigator: Stanley Hetzler, Ph.D., Project Director, Montgomery County Welfare Department, 23 N. Sears St., Dayton 2, Ohio.
Cooperating groups: Montgomery County Commissioners; Ohio State Department of Public Welfare.

16-Y-19 ADC FAMILY REHABILITATION PROJECT

Purpose: To evaluate the outcomes and effectiveness of a planned program of service directed toward: modifying the impaired functioning of the identified child; forestalling deviant and other maladaptive behavior patterns in the other siblings; and enhancing the functioning of the family as a group.
Subjects: 80 Aid to Dependent Children cases (40 experimental; 40 control) considered "high risk" families (in view of the aggressive behavior patterns noted in an older child). Families are to include two or more children under 10 years of age.
Methods: It is expected that priority will be given to some form of group treatment for both children and adults, but that some periodic individual casework contact with these families will be necessary. In addition, family social casework is planned.
Publication plans: An agency report will be available. Some studies will be reported in appropriate social work and psychological journals at a later date.

Duration: October 1962-October 1967.
Principal investigators: Alice R. McCabe, M.S., Staff Associate for Family and Child Welfare, Leonard S. Kogan, Ph.D., Director of Research, and Lawrence Berkowitz, M.A., Research Associate, Community Service Society of New York, 105 E. 22nd St., New York 10, N. Y.
Cooperating groups: New York City Department of Welfare; New York City Board of Education; Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-20 DEMONSTRATION OF SOCIAL GROUP WORK WITH PARENTS

Purpose: To demonstrate and evaluate the utility of social group work as a method for strengthening family life with the following types of clients: (1) parents who place their children in independent boarding homes, especially lower class working mothers who are part-time parents; (2) foster parents who board children placed by working mothers; and (3) mothers who are receiving grants under the Aid to Dependent Children program. Project will center its attention upon the prevention of emotional disturbance and/or delinquency in children through group treatment of parents--natural and foster parents. Its focus will be upon facilitating the healthy development of children by improving the attitudes and behavior of parents toward their children through the use of group discussion.
Duration: June 1962-May 1965.
Principal investigators: Paul H. Glasser, Ph.D., Assistant Professor, and Robert D. Vinter, Ph.D., Professor, School of Social Work, University of Michigan, Ann Arbor; Roger M. Lind, M.S.W., Director, Children's Division, and Lynn Kellogg, Director, Public Assistance Division, Michigan State Department of Social Welfare, Lansing 4, Mich.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-21 LOWER CLASS YOUTH DEVELOPMENT

Purpose: To investigate effects of the Aid to Dependent Children program on scholastic achievement and juvenile delinquency. Also, to study the personal and ecological factors associated with school failure and delinquency.
Subjects: All children, aged six, seven, or eight in 1950, on ADC in the New Haven Area (N = 328); a control group of same age and social class (N = 56).
Methods: Data were collected from ADC case records, city directories, school records, police records, and census tract statistics. Thirty main variables on each subject are being tabulated, cross-tabulated, and factor-analyzed.
Publication plans: Two papers planned.
Duration: June 1961-spring 1963.
Principal investigators: Erdman B. Palmore, Ph.D., and Philip E. Hammond, Ph.D., Assistant Professors of Sociology, Yale University, New Haven, Conn.
Cooperating group: Ford Foundation.

16-Y-22 FOLLOW-UP STUDY ON IMPACT OF DENIAL OR TERMINATION OF PUBLIC ASSISTANCE ON FAMILIES

Purpose: To describe the impact on needy families with children of the denial of public assistance, or the withdrawal of assistance before a substitute income is available. Purpose of the project is to provide legislators, administrators, and professional workers with knowledge of the operation and effects of current policies and practices with respect to eligibility for public assistance. The description will be made with particular reference to the program goals of (1) assuring a minimum level of health and decency to families who are without an income of their own, and (2) preventing and reducing dependency.
Methods: Project will be an exploratory one to be carried out over a one-year period in Massachusetts and Vermont, and will include cases drawn from the aid to dependent children and general assistance programs. On the basis of the exploratory work and findings of this study, it is hoped to launch a three-year study which will gather on a national basis information on families seeking help who are not given it.

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Duration: June 1961-October 1963.
Principal investigator: David G. French, Ph.D., Associate Professor, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham 54, Mass.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-23 REDUCING DEPENDENCY IN ANC FAMILIES THROUGH USE OF GROUP TREATMENT

Purpose: To determine the effectiveness of group treatment as a method of social intervention to promote positive changes in the social functioning of mothers and their adolescent children who have been receiving public assistance for a longer than average period.
Subjects: 44 families in the North County Office area, selected according to following criteria: (1) family members include mother and adolescent children living at home, but no father; (2) the last continuous period of aid has been two and one-half years or more; and (3) there is no evidence of active psychosis, acute alcoholism, or drug addiction.
Methods: Population is divided into experimental and contrast groups by random selection using three variables to stratify. The contrast group continues to receive the usual Aid to Needy Children services. Mothers and adolescent children are assigned to treatment groups which meet weekly for 10 months. Focus of treatment is on modification of actions and attitudes which prolong dependency and social dysfunctioning. After six months of peer group treatment, family group sessions are added to the treatment program. Effectiveness is measured by independent judges who use a social functioning profile obtained at beginning and termination of treatment.
Duration: August 1962-January 1964.
Principal investigators: Gloria Ambrosini, M.S.W., A.C.S.W., and Mrs. Louise A. Wilson, A.C.S.W., Caseworkers, Santa Clara County Welfare Department, North County District Office, 270 Grant Ave., Palo Alto, Calif.
Cooperating group: Family Service Association of Palo Alto and Los Altos.

16-Y-24 A DEMONSTRATION AND RESEARCH EVALUATION OF A GROUP WORK PROGRAM FOR ESTABLISHING A MUTUALLY BENEFICIAL RELATION BETWEEN THE YOUNG TEENAGE CHILD AND PARENT IN ONE-PARENT FAMILIES

Purpose: To plan a group work program aimed at maximizing the relations between parent and child in lower class homes broken by separation, divorce, or death. Hypotheses: through a program of guided group interaction, communication between parent and child will be facilitated and the problems of each will be better understood; through meetings with a trained worker, it is anticipated that groups of parents and children, groups of children alone, and groups of parents alone will become sensitized to the needs of both parent and child.
Methods: Weekly meetings will be held at the agency and monthly at a home with mother as a hostess. Techniques for involving the teenager would have to be experimentally derived. It is planned to reach out first to male teenagers and later to include girls. Focus of the weekly group meetings would be on the discussion of problems of the teenager's relation to his family. The efficacy of these interaction programs would be tested and modifications experimented with for use in the later demonstration program.
Duration: June 1962-May 1963.
Principal investigators: Paul K. Weinandy, M.S.A., Executive Director, Huntington Family Centers, 512 Almond St., and Nathan Goldman, Ph.D., Associate Professor of Sociology, Syracuse University, Syracuse, N. Y.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-25 ACTION RESEARCH PROJECT TO DETERMINE EFFECTIVENESS OF INTENSIVE GROUP WORK SERVICE IN CHANGING VALUES AMONG NEGRO BOYS IN FATHERLESS FAMILIES

Purpose: To test effectiveness of intensive social group work in changing certain prevailing

subcultural values as they relate to strengthening motivation and raising levels of aspiration among boys from fatherless families. To measure extent to which the changes affect work habits and school performance as well as the boys' acceptance of the concept and role of an adult male.
Subjects: Negro boys, ages 10 to 13 years, grades four to six, normal I.Q., from fatherless families.
Methods: Experimental group is being given intensive group work service. One control group is receiving normal group work service; another is receiving no service at all. Pre- and post-tests will be given all subjects.
Publication plans: The first year's report will be available early in 1963; publication of findings is planned.
Duration: June 1961-indefinite.
Principal investigators: John W. Cox, M.S.W., Director, and Clarence Barnes, M.S.S., Bell Neighborhood Center, Goodrich Social Settlement, 1839 E. 81st St., Cleveland 3, Ohio.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-26 AN EXPERIMENTAL STUDY OF SERVICES FOR FATHERLESS BOYS

Purpose: To develop a plan for an experimental research program to test or derive hypotheses that will provide answers to the following: (1) Which particular mental, emotional, behavioral, and social problems occur with relatively high frequencies among fatherless boys and their families for whom applications for services are received by the Big Brother agencies, as compared to other boys and families in the community? (2) Which of these problems should be prevented or overcome by Big Brother services, according to the opinions or judgments of responsible persons? (3) What services are currently being provided in Big Brother agencies and what are the conditions, policies and practices involved in their organization and administration? (4) How effective are existing services of Big Brother agencies in preventing or overcoming selected problems? (5) If the effectiveness of services by Big Brother agencies is less than certain acceptable levels, how can their effectiveness be increased to achieve these levels? (6) If the effectiveness of services of Big Brother agencies is at, or can be increased to, acceptable levels, how can the cost be kept within or reduced to certain maximum limits?
Duration: June 1962-May 1966.
Principal investigators: Ephraim H. Royfe, Consultant, and Gerald B. Gersey, Research Associate, Big Brothers of America, 1007 Suburban Station Bldg., and Julius A. Jahn, Ph.D., Professor of Social Research and Director of Research Center, University of Pennsylvania School of Social Work, Philadelphia, Pa.
Cooperating group: National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

16-Y-27 FATHERLESS FAMILIES AND HOUSING: A STUDY IN DEPENDENCY

Purpose: To examine the impact of different types of housing on the life styles, aspirations, cognitions, and behaviors of low income, fatherless families whose source of income is ADC, in contrast to those whose income is derived from current earnings or other sources. In addition, it is proposed to observe the contrasts in life style, etc., among low income families with radically different family structures by comparing fatherless families with "complete" families (those with husband and minor children residing in the household) and elderly individuals and couples.
Methods: Field interviewing for both the longitudinal and cross-sectional segments. Interviewing will cover all phases of the longitudinal sequence as they occur (i.e., moving in through moving out of the public housing project) and to the extent that they occur during this year.
Duration: 1962-1963.
Principal investigators: Irwin Deutscher, Ph.D., Director of Research, and Seymour Bellin, A.M., Research Associate, Youth Development Center, Syracuse University, Syracuse 10, N. Y.
Cooperating group: Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-28 AN EXPERIMENTAL PROJECT IN GROUP TREATMENT WITH POSTNATAL UNMARRIED MOTHERS WHO KEPT THEIR BABIES

Purpose: (1) To learn more about the problems of the unmarried mother who keeps her baby; (2) to determine whether group treatment can contribute to the reduction of acting out of difficulties through the symptom of illegitimate pregnancy; (3) to learn more about structuring groups and selecting group members to provide a meaningful interpersonal experience; (4) to provide an opportunity for catharsis and abreaction of feeling; (5) to help decrease girl's feelings of isolation and to encourage ability to interact with others; and (6) to support individual casework.
Methods: Three-generation social history precedes selection by psychological screening which includes projective techniques. Weekly group meetings with six to eight unmarried mothers consisting of 90-minute discussions on a supportive, cathartic level, over a nine-month period.
Findings: The more homogeneous the group in terms of underlying pathology, the more favorable the group climate is likely to be. Taking of notes by a group recorder seems unrelated to spontaneity in the group. Ability to express hostility verbally seems related to establishment of group cohesiveness. Group participation seems conducive to recognition of problems aside from the immediate problem of the infant's care and financial support. The unmarried mother who keeps her baby does not seem to have a typical personality pattern. Group experiences seem related to a changing perception of defiance as strength.
Duration: October 1961-October 1963.
Principal investigators: Vera L. Lindbeck, M.S.S., Supervisor, Girls' Department, and Lou Ann Reed, B.A., Probation Officer, Hamilton County Juvenile Court, 2020 Auburn Ave., Cincinnati 19, Ohio.

16-Y-29 INTENSIVE POSTPARTUM CASEWORK WITH UNMARRIED MOTHERS

Purpose: To demonstrate the feasibility of intensive social casework with young unmarried mothers in a maternity shelter and with their parents. Subsidiary aims are to make inquiry into treatment techniques with unmarried mothers, the role of male caseworkers in this field, the effectiveness of joint sessions with parents and client, and the development of instruments for evaluation of change in client's problems.
Subjects: Unmarried mothers between the ages of 13 and 19.
Methods: Subjects will be extensively tested and interviewed upon entering the shelter for purposes of establishing a baseline of their attitudes, problems, and potentialities. Mothers will be randomly assigned to an intensive casework group or to an informational control group. The study attempts to measure differences between the adjustment of the two groups to home and family, educational and occupational pursuits, and peer group, and also differences in self-concept and maturity. Casework will begin in the last trimester of pregnancy and extend through the first six months to a year of their readjustment period in the community. Evaluation will be done by a group of outside consultants who will not know which cases have received intensive treatment.
Duration: June 1962-May 1963.
Principal investigators: Daniel J. McSweeney, M.D., Chief of Obstetrics, St. Mary's Infant Asylum and Lying-In Hospital, 90 Cushing Ave., Dorchester, Mass.; John V. Driscoll, Ph.D., Dean, Boston College School of Social Work; George H. Grosser, Ph.D., Research Associate, Department of Psychiatry, and Theodore J. Curley, M.S.W., Social Work Consultant, Division of Legal Medicine, Harvard Medical School; Boston, Mass.
Cooperating group: Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

16-Y-30 UNMARRIED MOTHERS WHO KEEP THE FIRST OUT-OF-WEDLOCK CHILD

Purpose: To examine the experiences during the first crucial year and one-half following the birth of the first out-of-wedlock child.
Subjects: Approximately 300 unwed mothers who do not place their child for adoption.

Methods: Five areas will be covered: (1) completion of education; (2) means of financial support; (3) housing arrangements; (4) arrangements for care of the child; and (5) social adjustment (i.e., whether the unwed mother marries, becomes pregnant out-of-wedlock again, comes into contact with law enforcement agencies, is affiliated with neighborhood groups, etc.). Information will be obtained through a series of interviews with the unwed mothers beginning with a hospital interview at the time of confinement and supplemented by three follow-up interviews at six-month intervals. The investigation will focus upon the unwed mother's experiences in the five specified areas in terms of changes in her situation, problems faced and efforts to cope with them, factors associated with failures to cope with problems, etc.--information that can be used in planning the "package" of community health, welfare, and other services which would have the greatest potential for furthering the rehabilitation of the mother and the welfare of the child.
Publication plans: Interim and final reports to be published by Community Council of Greater New York.
Duration: 1962-1965.
Principal investigator: Mignon Sauber, M.A., Director, Research Department, Community Council of Greater New York, 345 E. 45th St., New York 17, N. Y.
Cooperating group: Social Security Administration, U. S. Department of Health, Education, and Welfare.

16-Y-31 CHILDREN OF WOMEN PRISONERS: RELATIONSHIPS OF A CORRECTIONAL INSTITUTION AND THE SOCIAL AGENCIES WORKING WITH INCARCERATED WOMEN AND THEIR CHILDREN

Purpose: To provide an accurate description of the current situation in California with regard to: number of women in the state prison having minor children and the number of children involved; residential placements of those children as compared to their living situations before the mother's incarceration; extent to which social welfare services are provided to those children in the community, and the patterns of agency usage; social welfare needs of the children not presently receiving services; extent and problems of interagency (including the institution) communication and coordination of services; what could be done differently or additionally to serve the needs of the family as a whole in a more effective and coordinated way.
Subjects: Personnel and inmates of California Institution for Women; children of women inmates; fathers and parental substitutes; community agency personnel.
Methods: Descriptive survey through data collected by file content analysis, questionnaires, and guided interviews.
Publication plans: Research reports of findings of the individual stages of project will be prepared for sponsoring departments. Research reports will be published jointly by California Departments of Social Welfare and Corrections. Articles for professional journals and/or a monograph may be published subject to approval of sponsoring agencies.
Duration: March 1962-August 1963.
Principal investigator: Serapio R. Zalba, M.S.W., California Institution for Women, Frontera, Calif.
Cooperating groups: California Departments of Social Welfare and Corrections.

16-Y-32 YOUTH-WORK PROGRAM REVIEW

Purpose: To assess impact of programs in counseling, placement, and training on problems of unemployed, out-of-school youth in selected urban areas, and to establish standards and guidelines for such programs.
Methods: Field visits and review of published materials using a standard report form. These data can then be utilized to determine which problem groups are being served and to what extent the needs of unemployable youth are being met in a given community--in addition to analysis of program elements.
Publication plans: A series of monographs in summer, 1963.
Duration: July 1962-July 1963.
Principal investigator: Marcia K. Freedman, Ph.D., Director, Youth-Work Program Review, National Committee on Employment of Youth, 419 Park Ave. So., New York 16, N. Y.
Cooperating group: President's Committee on Juvenile Delinquency and Youth Crime.

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16-Y-33 EFFECT OF SOCIAL GROUP WORK ON ANTISOCIAL YOUTH

Purpose: (1) To define and describe the social group work processes and professional social work intervention in the resocialization of hostile, acting-out, antisocial teenage boys; (2) to evaluate effectiveness of two methods--limited social group work and total social group work.

Subjects: Boys attending either of two seventh grades in junior high schools, identified through various psychological tests by sixth grade teacher's rating, willingness to participate, permission of parents, and exhibiting capacity to form peer relationships. Treatment groups of nine members will be formed of pairs and trios of youth with pre-existing close relationships.

Methods: Exploratory study leading to a field experiment for testing the two social group work methods. Pretesting in actual settings to be observed. Revisions and procedures will be made prior to final test of the two social group work methods. Final 18-month test period will rigorously adhere to procedures developed. Analysis of data will proceed concurrently with the practice. Analysis of changes that occur in norms and behavior of the treatment group and its members and measurement of both individual and group changes, and assessment of the roles of the group worker in the treatment process will be made. In general, data about the changes in the group will be derived by comparison of descriptive data at different time segments. Data from all sources will be analyzed so that a complete life history can be prepared on each youth with his relationship to the delinquent subculture and his relevant environments. Common elements in the life histories will be further analyzed as to their significance to professional intervention and the formation of treatment group attitudes.

Publication plans: Results will be reported periodically in papers and articles, and in book form at the end of the project.

Duration: October 1962-October 1967.

Principal investigator: Tsuguo Ikeda, M.S.W., Project Director, Seattle Atlantic Street Center, 2103 S. Atlantic St., Seattle 44, Wash.

Cooperating groups: United Good Neighbor Fund; Woman's Division of Christian Service, Board of Missions of the Methodist Church.

ORGANIZATIONS

ALABAMA

Alabama Boys Industrial School 16-M-42

ARIZONA

Arizona State University
  Education 16-N-8
  Psychology 16-N-8

CALIFORNIA

Alameda County Mental Health Study 16-X-10
California Institution for Women 16-Y-31
California State Department of Corrections
  Parole Outpatient Clinic 16-U-14
Camarillo State Hospital 16-L-11
Chico State College 16-D-5
Children's Hospital of the East Bay
  Child Guidance Services 16-X-11
Children's Hospital, San Francisco 16-A-9
East Bay Activity Center 16-L-16
Homemakers Service of Los Angeles, Inc. 16-Y-17
Kennedy Child Study Center 16-S-22
Langley Porter Neuropsychiatric Institute 16-L-2, 16-T-12
Los Angeles State Mental Hygiene Clinic 16-M-4
Metropolitan State Hospital, Norwalk 16-U-13
Mount Zion Hospital and Medical Center 16-B-1
  Psychiatric Clinic 16-L-16, 16-U-5
Pacific State Hospital 16-S-19, 16-S-23, 16-S-28, 16-S-29
Palo Alto Medical Research Foundation
  Mental Research Institute 16-M-29
Pasadena City Schools 16-O-18
San Diego State College
  Education 16-P-9, 16-R-3
San Fernando Valley State College
  Child Study Center 16-K-1
  Psychology 16-T-5
San Jose State College
  Psychology 16-U-12
Santa Clara County Welfare Department 16-Y-23
Sonoma County Schools 16-R-1
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Spastic Children's Foundation 16-T-6
Stanford Convalescent Home 16-F-12
Stanford University
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  Berkeley
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    Child Psychiatry 16-Y-3
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  San Francisco
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COLORADO

Children's Asthma Research Institute and Hospital 16-T-7
Colorado State College
  Education 16-M-2
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Colorado State Department of Public Health
  Maternal and Child Health 16-X-2
Colorado State University
  Education 16-M-11
University of Colorado
  Child Research Council 16-A-1
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  Psychiatry 16-F-10
University of Denver
  Psychology 16-F-2
West Denver High School 16-O-6

CONNECTICUT

Child Guidance Clinic of Greater Bridgeport, Inc. 16-L-20, 16-Y-2
Connecticut State Department of Adult Probation 16-M-38
Council of Social Agencies, New Haven 16-Y-13

- Fairfield University
  - Sociology 16-M-21
- University of Bridgeport
  - Psychology 16-M-38
- University of Connecticut
  - Psychology 16-F-6, 16-W-9
- Wesleyan University
  - Psychology 16-W-9
- Yale University
  - Epidemiology and Public Health 16-U-2
  - Obstetrics and Gynecology 16-A-9
  - Psychiatry 16-A-9
  - Psychology 16-I-2
  - Sociology 16-Y-21

DELAWARE

- Hospital for the Mentally Retarded 16-S-9

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  - Psychology and Psychiatry 16-S-16
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- Children's Hospital
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- District of Columbia Society for Crippled Children 16-Q-10
- Gallaudet College
  - Psychology 16-Q-7
- George Washington University
  - Medical School 16-T-10
- Institute for Educational Research 16-Q-8
- Washington School of Psychiatry 16-N-6

FLORIDA

- Florida State University
  - Human Development Clinic 16-R-2
  - Sociology 16-M-18
- University of Miami
  - Education 16-M-24
  - Psychology 16-S-15
- Yerkes Laboratories of Primate Biology 16-S-10

GEORGIA

- Emory University
  - Sociology and Anthropology 16-N-9
  - Teacher Education 16-N-9
- Gracewood State School and Hospital
  - Pediatrics 16-S-4
- Medical College of Georgia
  - Biochemistry 16-S-4
  - Psychiatry 16-S-4

HAWAII

- Hawaii State Department of Health
  - Mental Retardation Division 16-W-13
- University of Hawaii
  - Psychology 16-H-4

ILLINOIS

- Chaddock Boys School, Quincy 16-O-19
- Evanston Community Consolidated Schools 16-P-6
- Jewish Children's Bureau 16-L-12
- Jewish Vocational Service 16-Q-13
- Northwestern University
  - Neurology and Psychiatry 16-T-3
  - Sociology 16-V-4
- Southern Illinois University
  - Sociology 16-M-3
- University of Chicago
  - Community and Family Study Center 16-V-8
  - Education 16-E-3
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- University of Illinois
  - Education 16-P-11
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INDIANA

- Goshen College
  - Sociology 16-U-7
- Indiana University
  - Audiology 16-D-1
  - Computing Center 16-M-18
  - Education 16-K-1
  - Psychology 16-V-1
- St. Francis College
  - Psychology 16-H-5

IOWA

- Iowa State University of Science and Technology
  - Child Development 16-K-6
  - Economics and Sociology 16-M-17
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- State University of Iowa
  - Child Welfare Research Station 16-D-2
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KANSAS

- Institute of Logopedics 16-A-10
- Parsons State Hospital and Training Center 16-S-11
- University of Kansas
  - Bureau of Child Research 16-F-8, 16-S-11

KENTUCKY

- Child Guidance Clinic, Inc. 16-M-35
- Kentucky State College
  - Psychology 16-O-8
- University of Kentucky
  - Counseling Service 16-J-2
  - Psychology 16-J-2, 16-O-8
- University of Louisville
  - Child Development Unit 16-W-7
  - Medical Psychology 16-M-35

LOUISIANA

- Charity Hospital
  - Obstetrics and Pediatrics 16-A-9
- Community Services Council, Baton Rouge 16-M-40
- Southern University and Agricultural and Mechanical College
  - Laboratory School 16-K-4
  - Psychology 16-K-4
- Tulane University
  - Sociology and Anthropology 16-W-5
  - Teacher Education 16-O-14

MARYLAND

- Cedar Knoll School 16-M-6
- Goucher College
  - Sociology 16-M-20
- Johns Hopkins University
  - Child Psychiatry 16-L-3
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  - Medical Psychology and Pediatrics 16-D-7, 16-L-3
  - Obstetrics and Gynecology 16-A-9
  - Social Relations 16-W-15
- Prince Georges County Board of Education 16-N-6
- University of Maryland
  - European Branch, Germany 16-L-9
  - Institute for Child Study 16-O-5

MASSACHUSETTS

- Beth-Israel Hospital
  - Surgery 16-K-11
- Boston College
  - Social Work 16-Y-29
- Boston Lying-In Hospital
  - Obstetrics and Gynecology 16-A-9
  - Pediatrics 16-A-9
- Boston Sanatorium 16-K-11
- Boston University
  - Child Development Unit 16-H-1
- Brandeis University
  - Psychology 16-D-4
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- Children's Medical Center 16-A-9, 16-U-18
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RESEARCH NOTES

NEW LOOK, NEW PROCESS FOR *RESEARCH RELATING TO CHILDREN*

The next issue of *Research Relating to Children* will probably be quite different from the one you are now reading. It will be produced using a limited data storage and retrieval system currently being adopted by the Children's Bureau Clearinghouse for Research in Child Life, and will incorporate changes in its format and content to provide more useful research information. The proposed system will initially consist of a machine which produces punched paper tape and has the ability to follow an elementary program of information storage, selection, and reproduction. The tapes will also be used as direct input to an RCA 301 computer for automatic handling of Clearinghouse mailing lists, and ultimately for final production of copy for Clearinghouse publications. It is probable that the conversion of existing records and systems to the new automated process will make it necessary for the Clearinghouse to suspend its publications and services for several months. It is felt that the gains in coverage, speed, and additional services under the new system will amply justify this brief interruption.

STANFORD OPENS RESEARCH INSTITUTE FOR CHILDHOOD APHASIA

The Scottish Rite Institute for Childhood Aphasia opened last fall at the Stanford University Medical Center with initial funds of $22,200 granted by the Scottish Rite Foundation of California. Ten to fifteen neurologically impaired aphasic children of preschool age will be studied and will receive training for periods of one to three years. Goals of the institute include the development of special techniques to teach these children to speak and understand language, and to pinpoint learning problems associated with brain injury. It is also planned to train teachers and speech therapists for work with aphasic children, and to provide counseling and guidance for parents of children who cannot be accepted by the Institute. Institute director is Dr. Jon Eisenson.

IN PLANNING -- NATIONAL CLEARINGHOUSE ON MENTAL HEALTH INFORMATION

The National Institute of Mental Health will shortly open its new National Clearinghouse on Mental Health Information in Bethesda, Md. The Clearinghouse will have as its function the collection, storage, abstracting, indexing, retrieving, and dissemination of all information relevant to mental health, both quantitative and qualitative in content. Coordinating and liaison relationships with professional and voluntary organizations will be emphasized. Through evaluation and synthesis of information, the Clearinghouse will serve as a major technical resource for the Institute's program analysis, program evaluation, and program planning activities. Personnel include Dr. Joseph H. Douglass, Chief, and Dr. Lorraine Bouthilet, Assistant Chief.

EDUCATIONAL PSYCHOLOGY JOURNAL ANNOUNCED BY OHIO STATE UNIVERSITY

The Division of Special Education of the Ohio State University's Department of Education has announced the publication of a new journal, the *Journal of School Psychology*. Its purpose is to provide an outlet for research studies and articles in professional school psychology, and will serve primarily as an organ for publication by school psychologists and school psychology trainees in the State of Ohio. It will be published semiannually, with the first issue planned for January 1963. For information concerning submission of manuscripts, write to: Donald C. Smith, Editor, *Journal of School Psychology*, Department of Psychology, Ohio State University, Columbus 10, Ohio.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind.

Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn.

Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. (Gives synopses of U. S. doctoral dissertations with an annual index.)

dsh abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington 2, D. C.

Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y.

Inventory of Social and Economic Research in Health, Health Information Foundation, 420 Lexington Ave., New York 17, N. Y.

Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York 17, N. Y.

Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.

Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington 6, D. C.

Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill.

Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York 3, N. Y.

Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York 24, N. Y.

Sources of Morbidity Data, Clearinghouse on Current Morbidity Statistics Projects, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

The Excerpta Medica Foundation, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y., has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, Excerpta Medica can provide to subscribers, at cost, photocopies and translations of complete articles.

Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 888 categories of human behavior. Complete sets of all files are available in 16 member universities in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn.

Science Information Exchange, Smithsonian Institution, 313 Universal Bldg, Connecticut and Florida Aves., N. W., Washington 6, D. C., provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington 25, D. C.

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name____

Address____

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Name____

Address____

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Name____

Address____

____

Name____

Address____

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Signed__________________________

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ACCORDING TO THE CRITERIA ESTABLISHED BY THE CLEARINGHOUSE, THE FOLLOWING TYPES OF STUDIES ARE NOT ELIGIBLE FOR INCLUSION IN RESEARCH RELATING TO CHILDREN

Studies already reported to the Clearinghouse

Studies already published or which will be published before the next issue of Research Relating to Children

Studies completed more than two years ago

Masters' theses, unless they represent work beyond a doctorate, as in dentistry

Annual or biennial reports or other regularly collected information

Handbooks, manuals, directories, textbooks, etc.

Historical or descriptive studies; studies based on secondary sources; bibliographical materials

Studies of test development, standardization, or validation, except tests for special groups of children such as blind or retarded

Studies of local or temporary significance; those of interest primarily to the agency involved

Studies of services or programs not primarily related to children

Studies of general population in which children comprise only an incidental part

Demonstration projects where no formal plan for evaluation is described

Studies of college students or adults where the focus is not on their childhood; studies of parents where the emphasis is not on their children

Educational studies of curriculum construction or materials; teaching methods; general school personnel studies where children are not directly affected; survey of school facilities or needs; general school administration studies

Studies of the training, personality, or aptitude of personnel without measurement of the effects on children

Medical, dental, or nutrition studies limited to: morphology or physiology; the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions; surgery, chemotherapy, antibiotics or physical therapy, etc. (According to 1956 revision of criteria for inclusion.)

Biochemical or other laboratory studies

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Welfare Administration
Children's Bureau

Clearinghouse for Research in Child Life

NOTICE OF RESEARCH PROJECT

for inclusion in
Research Relating to Children,
the Children's Bureau
inventory of current
research projects

For purposes of this inventory, "children" are defined as persons under 18 years of age, or college students if their childhood is of primary concern.

PLEASE REPORT STUDIES IN PROGRESS ON CHILDREN	**growth and development • intelligence • personality and emotional disorders • educational process • health and social services for children**
PLEASE DO NOT REPORT STUDIES	**already reported, published, or soon to be published • completed more than two years ago • on purely medical subjects • on curriculum development or teaching methods • on personnel training • on test development (except for special groups of children such as blind or mentally retarded) • of local or temporary significance • demonstration projects unless there is a formal plan for evaluation • masters' theses, unless they represent work beyond a doctorate, as in dentistry**

If you or your colleagues are currently doing research on children, please supply the information requested on the reverse side.

If you are not doing research on children now, do you expect to do any in the next two years?
yes ____ no ____ do not know ____

Does this information represent a reply for -- an individual only ____
an organization or department as a whole ____

If you know of other investigators of whose research the Clearinghouse should be informed, please give name(s) and address(es) below:

____
____
____

Information supplied by

name ____
position ____
organization and address ____
____
if person who received form is not filling it out, please indicate why ____________________
____

Form CB - 200 - C **Budget Bureau No. 72 - R396.9**

PLEASE TYPE OR PRINT

Title of project:

Purpose:

Subjects:

Methods:

Findings:

Publication references and/or plans. (If no publication is planned, please indicate under what conditions data and results will be available.)

Date project initiated:

Estimated terminal date:

Principal investigator(s) only	Degree	Position and organization

Cooperating groups (foundations, Federal and State agencies, etc.):

If this represents work toward an academic degree, please state degree ___________

(Please do not report masters' theses unless they represent work beyond a doctorate, as in dentistry.)

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE - Welfare Administration - Children's Bureau

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Previous Issues of Research Relating to Children

Single copies of the following issues are available without charge from the Children's Bureau. U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

Bulletin I, Supplement 3 (Research reported August - December 1950)

Bulletin I, Supplement 4 (Research reported January - April 1951)

Bulletin I, Supplement 5 (Research reported May - December 1951)

Bulletin II, Supplement 2 (Research reported November 1952 - May 1954)

Bulletin II, Supplement 3 (Research reported April 1954 - January 1955)

Bulletin II, Supplement 4 (Research reported February - November 1955)

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Bulletin 15 (Research reported October 1961 - June 1962) - $1.00

The following issues are out of print

Bulletin I (Research reported December 1948 - June 1949)

Bulletin I, Supplement 1 (Research reported July 1949 - March 1950)

Bulletin I, Supplement 2 (Research reported April - July 1950)

Bulletin II (Research reported January - October 1952)

Bulletin II, Supplement 1 (Masters' theses reported January 1952 - March 1954)

Bulletin 4 (Research reported May - September 1956)

Bulletin 5 (Research reported October 1956 - February 1957)

Bulletin 11 (Research reported August 1959 - January 1960)

Bulletin 12 (Research reported February - July 1960)

Bulletin 13 (Research reported August 1960 - January 1961)

An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. Additional free copies of each issue are sent to directors of research centers and to libraries upon direct request from the Clearinghouse, Children's Bureau, U. S. Department of Health, Education, and Welfare.

The Clearinghouse will be glad to add anyone to the mailing list to be notified whenever a new issue is published.

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bulletin no. 17

RESEARCH relating to CHILDREN

U. S. DEPARTMENT
of HEALTH,
EDUCATION,
and WELFARE

Welfare Administration

Children's Bureau

CHILDREN'S BUREAU - Katherine B. Oettinger, Chief
Division of Research - Helen L. Witmer, Director
Child Life Studies Branch - Elizabeth Herzog, Chief

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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RESEARCH relating to CHILDREN

bulletin 17

studies in progress on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIAL, ECONOMIC, and CULTURAL INFLUENCES
- HEALTH SERVICES and SURVEYS
- SOCIAL SERVICES

February 1963 - February 1964

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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FOREWORD

This Bulletin like previous issues, includes reports of research in progress or research very recently completed. It does not report again studies included in Bulletin 3 through 16 even though they are still continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse February 1, 1963 through February 29, 1964.

The Clearinghouse has only such information about the research projects as the abstracts provide. Publication references and plans are given for some of the projects, but the Clearinghouse cannot attempt to keep track of the final publication of the studies. The reader who wishes to obtain further information about any of the projects reported should write directly to the investigator or check professional journals in the appropriate field.

For the Clearinghouse, I wish to thank those who have submitted reports and to acknowledge the valuable assistance of the National Council on Crime and Delinquency, the Clearinghouse on Morbidity Statistics Projects of the U. S. Public Health Service, and the several foundations which provide us with information about recent research grants.

Katherine B. Oettinger

Katherine B. Oettinger
Chief, Children's Bureau

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 121 is a form for letting us know of other investigators who are working in the field. Page 123 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

17-A-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver 20, Colo.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; Nutrition Foundation; National Live Stock and Meat Board; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Appropriate medical or scientific journals every year. Publication lists available.

17-A-2 **ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS**

Initiation date: 1930.
Investigator(s): Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

17-A-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

17-A-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from prepuberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Assistant Professor of Physiology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publication: Numerous journal articles; one book is planned, another possible.

17-A-5 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (35 years).
Subjects: Full term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above average group. 100 offspring of these subjects, age range from a few months to about 16 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs and skeletal X-rays taken at most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.
Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Associate Research Psychologist, Institute of Human Development, University of California, Berkeley 4, Calif.
Cooperating group(s): Institute of Human Development, University of California.
Publication: *Studies in the Development of Young Children*, University of California Press, 1940. *Growth Diagnosis*, University of Chicago Press, 1959. *Child Development* 12:167-173, 1941; 27:45-74, 1956. *American Psychologist* 10: 805-818, 1955. Monograph, Society for Research in Child Development 28, 1963.

17-A-6 PATTERNS OF SOOTHING AND EXCITATION IN NEONATES

Purpose: To investigate the role of excitatory and inhibitory patterns in neonatal development through use of behavioral ratings and heart rate measurements. This research is part of a long-term study of regulatory principles and mechanisms which govern neonatal behavior (see Bulletin 5, *Research Relating to Children*).
Subjects: Normal, healthy, 2 to 5 day old full term babies born at Bronx Municipal Hospital Center.
Methods: Heart rate and behavioral ratings obtained for all experimental sessions. Each neonate tested at three sessions: test, retest on reactions to a series of soothing stimuli, and one session of trials of excitatory stimuli. Soothing stimuli applied when neonates are aroused are a tone, rocking, sweetened pacifier inserted in babies' mouths, immersion of babies' feet in warm water, and a control period. Each stimulus condition applied three times. Excitatory stimuli applied after feeding when neonates are quiescent are a tone, cold disc applied to the abdomen, and rocking.
Findings: Data analyzed with respect to (1) relationship between heart rate and behavioral ratings; (2) individual differences in overall soothability and in most effective soothing stimuli; (3) test-retest reliability on successive days; and (4) relationship between excitatory and inhibitory patterns.
Duration: January 1962-continuing.
Investigator(s): Sibylle Escalona, Ph.D., Professor of Psychology in Psychiatry, Wagner H. Bridger, M.D., Assistant Professor of Psychiatry, Beverly M. Birns, Ph.D., and Marion Blank, Ph.D., Instructors in Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-A-7 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semi-annual follow-up of more than 2,000 children registered at the Institute.
Methods: School Series: initially based on 600 school children in 5 schools (now 22 schools), ages 6-12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays. American Negro Series: 150 Negro children with normal occlusion selected to study with a view to establishing tentative standards of facial growth. Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc. Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made. Orthodontic Treatment Series: a small pilot study of 15 white boys, age 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment. Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate. Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as facio-dental growth dysplasia. Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern. Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional stability, and other aspects of classroom behavior to see if there is any real correlation.
Initiation date: 1947.
Investigator(s): Wilton M. Krogman, Ph.D., Director, Institute for Child Study of Philadelphia, Philadelphia, Pa.
Cooperating group(s): Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

17-A-8 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland 1, Oreg.
Cooperating group(s): University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Recent articles: Radiology, April 1961; July 1962; Journal of Dental Research, July-August 1961; July-August 1962. Human Biology, February and September 1962.

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17-A-9 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4483 Cleveland children; 134 Boston children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to provide standards of reference.
Duration: 1948-1964.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., Professor and Head, Department of Anatomy, Stanford University, Stanford, Calif.
Cooperating group(s): Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.
Publication: Current standards: Radiographic Atlas of Skeletal Development of Elbow and Shoulder; Radiographic Atlas of Skeletal Development of Hip. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.

17-A-10 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 15 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956.
Investigator(s): Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Oreg.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publication: Johns Hopkins Magazine, June 1959.

17-A-11 RESEARCH ON SPEECH AND LANGUAGE DISORDERS

Purpose: To investigate etiology, prevention, and rehabilitation in speech and language disorders of children with cerebral palsy, aphasia, cleft palate, endocrine disorders, Mongolism, or mental deficiency.
Subjects: Study group chosen from clinical population, approximately 1,500 cases, and matched with normal controls.
Methods: Basic studies on anatomy and functional laryngx, respiration, etc., including X-ray measurements and similar techniques; various other research methods (generally behavioral items) depending upon area under study.
Initiation date: 1934.
Investigator(s): Martin F. Palmer, Sc.D., Director, Institute of Logopedics, 2400 Jardine Dr., Wichita 19, Kans.
Cooperating group(s): Federally supported.
Publication: Articles appearing regularly in *Journal of Speech and Hearing Disorders*, *Journal of Speech and Hearing Research*, *Cerebral Palsy Review*, etc.

17-A-12 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Initiation date: 1936.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group(s): Lilly Endowment, Inc.
Publication: Published in *Union College Studies in Character Research*. Also *Dimensions of Character*, Macmillan, 1956.

GROWTH AND DEVELOPMENT

General

17-B-1 **MENTAL, MOTOR, AND BEHAVIOR DEVELOPMENT IN FIRST 30 MONTHS OF LIFE AS MEASURED ON NANCY BAYLEY'S SCALES OF DEVELOPMENT**

Purpose: To revise and restandardize the scales which were first published in 1933 and 1935, and to study ethnic and cultural differences in development during first two years of life.
Subjects: (1) 1200 infants, aged 1 to 15 months, tested in 10 cities by psychologists of the NINDB Perinatal Research Project; (2) approximately 500 infants, aged 1 to 30 months, tested in the NIMH Laboratory of Psychology; and (3) 160 children, aged 18 to 30 months, tested at the University of California. All are presumably normal infants, about 60 percent are white, 40 percent are Negroes, and a few are of other ethnic origin.
Methods: Psychologists from various perinatal research centers were trained in administration of tests to infants up to 16 months old. All records were sent to principal investigator for statistical analyses. On basis of these analyses, selected items were retained in revised scale. Scores obtained on revised scale have been further analyzed for comparisons of means and SDs by age, according to ethnic groups, sex, birth order, and parent's education.
Findings: Preliminary analysis of the 18 to 30 month tests have resulted in a scale with tentative norms for these ages. Further analyses of this portion of scales remain to be completed. Scales show good age-progression, internal consistency, and reliability. No significant differences were found in scores between boys and girls 1 to 15 months old, higher and lower education of parents, birth order, or Negroes and whites with but one exception: Negro babies in the first 13 months of life score higher, on the average, than whites.
Duration: 1958-1965.
Investigator(s): Nancy Bayley, Ph.D., Institute of Human Development, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-B-2 **RELATIONSHIP OF EARLY INFANT TESTS, I.Q., AND GROSS MOTOR BEHAVIOR AT THIRTY MONTHS AND BEHAVIOR IN THE PREMATURE CHILD RELATED TO NEUROLOGIC DEFICIT AND SOCIAL SITUATION**

Subjects: 250 Negro premature infants weighing 2100 grams or less at birth; 50 term infants as a comparison group.
Methods: Each child was given neurologic, psychologic, and social work ratings at stated periods beginning at age three days, the last at two and one-half years. Comparisons were made between neonatal findings and child's scores.
Findings: There is a relationship between gross motor development and I.Q. in the premature child at 30 months, and between gross motor development and behavior. Gross motor development is a measure of neural intactness. Noxious social situation is related to deviant behavior in the brain injured child.
Duration: 1956-1963.
Investigator(s): Alfred Freedman, M.D., Professor and Chairman, and Helen Wortis, M.S., Assistant Professor, Department of Psychiatry; Caryl Heimer, M.D., Assistant Professor, Departmet of Pediatrics, and Rhoda Cutler, M.A., Research Psychologist, New York Medical College-Flower and Fifth Ave. Hospitals, New York 29, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health

Service, U. S. Department of Health, Education, and Welfare.
Publication: Two papers will be presented to Society for Research in Child Development, April 1964. Mimeographed copies on request.

17-B-3 ADAPTIVE PROCESSES IN INFANT-ENVIRONMENT INTERACTION

Purpose: To investigate motility and crying patterns in infants over the first 10 days of life in relation to characteristics of care-taking intervention.
Subjects: Normal newborn infants with uncomplicated delivery; control group of infants receiving routine nursery care will be compared with groups in which dimensions of care can be varied experimentally.
Methods: Use of a specially designed automatic monitor, which records a continuous 24 hour tracing of motility and crying behavior over the first 10 days of life. Activity and distress cycles thus indicated will be studied in relation to timing and characteristics of interventions.
Duration: September 1963-December 1965.
Investigator(s): Louis W. Sander, M.D., Associate Research Professor of Psychiatry, School of Medicine, Boston University, Boston, Mass.
Cooperating group(s): Boston University-Massachusetts Memorial Hospitals; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication describing investigation, instrument, and method is expected in 1964. Data from experimental group should follow in 1965.

17-B-4 STIMULUS CONDITIONS, INFANT BEHAVIORS, AND SOCIAL LEARNING IN DIFFERENT CHILD-REARING ENVIRONMENTS

Purpose: To describe and assess stimulus conditions provided, infant behaviors, and the opportunities for adaptive and social learning those stimuli constitute for the infant behaviors during the first year of life.
Subjects: Infants of four age groups (8, 16, 24, and 32 weeks) from four different child-rearing environments in Israel: residential institution, Kibbutz, only-child, and multiple-child middle class town families.
Methods: Codified observation procedure developed and used with a record sheet marked off in half-minute units. Included were reliable observation categories covering: background events, setting, subject's behaviors, various stimuli provided particularly by caretakers, interaction exchanges between subject and his environment, and subject's gross activity level. Occurrence of behaviors, but not their durations, were recorded continuously throughout the observation period.
Findings: Data currently being readied for computer analysis; first findings should be available by 1965.
Duration: 1961-1966.
Investigator(s): Hava B. Gewirtz, Ph.D., Research Associate, Institute for Behavioral Research, 2426 Linden Lane, Silver Spring, Md., and Jacob L. Gewirtz, Ph.D., Research Psychologist, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): Department of Psychology, Hebrew University of Jerusalem; Computer Science Center, University of Maryland; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Preliminary report to be published in B. Foss (Editor), *Determinants of Infant Behaviour*, Vol. 3, New York, Wiley, 1964. Several monograph reports beginning in 1965.

Physical

17-C-1 EFFECTS OF OBSTETRIC ANALGESIA ON NEONATAL SUCKING

Purpose: To study the effects of central nervous system depressants administered to the mother during the course of labor and delivery upon sucking behavior of the infant during the first week of life. It is thought that the study of factors which affect early maternal-infant feeding relationships may be relevant to understanding subsequent physical and mental maturation.
Methods: A method of recording infant sucking activity developed by the investigators (see Bulletin 15, Research Relating to Children) will be used. Sucking behavior of a group of babies whose mothers have received large doses of obstetric analgesia and inhalation anesthesia during labor and delivery will be compared with a group whose mothers received no such medication.
Investigator(s): Reuben E. Kron, M.D., Associate in Psychiatry, Katharine E. Goddard, M.D., Associate in Pediatrics, and Marianne Drann, R.N., University of Pennsylvania, Philadelphia 4, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-C-2 EXPENDITURE AND FOOD INTAKE OF ADOLESCENTS AND ELDERLY PEOPLE

Purpose: To provide information on normal food intake and total energy expenditure of adolescents and elderly people. These two groups are especially important since they are particularly vulnerable in conditions where food may be in short supply. Knowledge about food intake and energy expenditure of these groups is inadequate at the present time.
Methods: Field surveys will cover the different social and economic groups in Scotland within the age ranges mentioned. These surveys will consist of measurements of total food intake and total energy expenditure on individual subjects.
Investigator(s): Dr. J. V. G. A. Durnin, Elaine C. Blake, Fiona Aitken, and Jennifer M. Hockley, Institute of Physiology, University of Glasgow, Glasgow, W.2., Scotland.
Cooperating group(s): National Institute of Arthritis and Metabolic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare.

Perceptual, cognitive, and motor

17-D-1 DEVELOPMENTAL STUDY OF COORDINATED EYE MOVEMENTS IN THE HUMAN INFANT

Purpose: (1) To determine the development of visual acuity in the newborn, in the infant, and in the preschool child; (2) to study the degree of binocular coordination at birth, in infancy, and in early childhood; and (3) to relate maturation of the sensory and motor apparatus of the eye with presence or development of extraocular muscle imbalance.
Methods: Electro-oculography, D.C.
Findings: Newborns have a graded Snellen acuity of at least 20/150; fixation reflex is present at birth.
Duration: 1962-continuing.
Investigator(s): Glenn O. Dayton, Jr., M.D., Assistant Professor of Surgery/Ophthalmology, and Margaret H. Jones, M.D., Associate Professor of Pediatrics, University of California, Los Angeles 24, Calif.
Cooperating group(s): National Institute of Neurological Diseases and Blind-

ness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Archives of Ophthalmology*, two issues in press; *Neurology*, in press.

17-D-2 SENSORY DISCRIMINATION AND LEARNING IN HUMAN INFANTS

Purpose: To explore learning capabilities of children under one year of age; to utilize these techniques for the assessment of discriminative capabilities of infants.
Subjects: Newborns at Providence Lying-In Hospital, and same infants seen at Child Development Study Follow-up Center.
Methods: Classical and operant conditioning techniques.
Duration: 1958-1965.
Investigator(s): Lewis P. Lipsitt, Ph.D., Department of Psychology, Brown University, Providence 12, R. I.
Cooperating group(s): Providence Lying-In Hospital; National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-D-3 EARLY AUTONOMY IN CHILDREN

Purpose: To study mother-child interaction in order to ascertain what effects, if any, parental behavior has on autonomous behavior. This behavior (now called "competence" rather than "autonomous") is defined as the ability of the child to initiate and sustain motor and visual-motor activity at a given level of complexity and self sufficiency.
Subjects: 32 mother-child pairs. Children classified as high and low in competence, and mothers classified as laissez faire, prohibiting, stimulating, and mixed.
Methods: Children followed at four-week intervals from their 12th to 20th month. Observation in home during child's time of free play. Descriptive accounts evaluated at three levels: detailed scoring of each behavior, overall ratings, and an interpretative description.
Duration: Ausust 1963-August 1966.
Investigator(s): Charles Wenar, Ph.D., Assistant Professor, University of Pennsylvania School of Medicine, Philadelphia 4, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles or a monograph planned.

Communication

17-E-1 EFFECTS OF TRAINING CHILDREN IN COMMUNICATION SKILLS

Subjects: Small groups of 9 to 12 year old children.
Methods: A communicator, drawn from each group, communicates enough information to the other members to allow them to perform a specified task. The other children then attempt to perform this task as a tape recording of the communication is played back. Group discussion follows. Communicators obtain three kinds of feedback about their message: (1) listening to their own taped voices; (2) observing whether other children can perform the task; and (3) hearing criticism of the other children. Group members take turns

as communicator. Tasks fluctuate between two extremes: those requiring brief instructions and those requiring complex ones. Evaluation of effects of this training experience from taped communications and from changes recorded on a variety of communication pretests and post-tests.
Investigator(s): Charles Luther Fry, Jr., Ph.D., Assistant Professor of Psychology, University of Virginia, Charlottesville, Va.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-E-2 REINFORCING EFFECTS OF REFLECTED VOCALIZATIONS

Purpose: Within the real life situation of a nursery school, to test hypothesis that child's perception of his own vocalizations serves, in general, as reinforcement for vocal behavior.
Subjects: 22 preschool children, 10 boys and 12 girls, enrolled in the nursery school, Department of Psychology, University of Maine in fall 1963.
Methods: Telephone set installed in nursery school room to record vocalizations of children into the receiver and, as desired, return either voice-controlled white noise (control condition) or vocalizations of individual children on a two-second delay basis via earpiece of telephone. Access to telephone limited to half hour each day during free-play period. Spontaneous vocalizations recorded first 10 days; white noise returned next five days; vocalizations reflected next 10 days; and white noise returned last five days.
Findings: Vocal behavior of children increased above the "no-reflection" and "white-noise" reflection conditions when children's vocalizations were returned to them on a two-second delay basis. Children tended to repeat the vocal sounds which they uttered during period of delayed "self-reinforcement".
Duration: February 1963-September 1964.
Investigator(s): Joseph J. Antonitis, Ph.D., Professor of Psychology, University of Maine, Orono, Me.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Mimeographed report will be made available by summer 1964.

Learning

17-F-1 ASSOCIATIVE PROCESSES IN CHILDREN'S VERBAL LEARNING

Purpose: To investigate the role of simple associative processes in perception, learning, recall, and mediated generalization of children. To determine some factors underlying differences between children and adults in these areas.
Subjects: Children in grades 4 to 12.
Methods: Paired-associate learning, tachistoscopic recognition, clustering in recall.
Findings: In contrast to studies with adults, this study shows that differences in paired-associate learning as a function of associative strength may be demonstrated with children. Children show less clustering in recall and more associative generalization than adults. Studies of mediated association using natural language associates may also be shown with children in paired-associate learning.
Duration: September 1962-indefinite.
Investigator(s): David S. Palermo, Ph.D., Associate Professor, Department of Psychology, Pennsylvania State University, University Park, Pa.
Cooperating group(s): National Science Foundation.
Publication: To be submitted to appropriate journals.

17-F-2 CURIOSITY AROUSAL AND ITS EFFECTS ON LEARNING

Purpose: To determine: (1) the effects of age and ability on curiosity arousal; (2) the effects of complexity, ambiguity, abstractness and incongruity on curiosity arousal; and (3) the effects of curiosity arousal on learning.
Subjects: 60 children (30 each from second and sixth grade classrooms) representing equally I.Q. ranges 92-108, 112-128, and above 132.
Methods: Observation in a semistructured situation, presentation of stimulus materials by S-controlled tachistoscope, and immediate and delayed recall of objects in observation situation.
Duration: January 1963-February 1964.
Investigator(s): N. L. Pielstick, Ph.D., Associate Professor of Psychology, Northern Illinois University, DeKalb, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

17-F-3 SEQUENCE CHARACTERISTICS OF TEXT MATERIALS AND TRANSFER OF LEARNING

Purpose: To obtain information on the relative effectiveness and efficiency for retention and transfer of text materials varying in sequencing characteristics referred to loosely as "guided discovery" and "direct exposition". Previous studies reported in the literature have lacked specification of psychological parameters of the text materials and have seemingly attributed obtained results to sequencing of materials presented without regard to what was being presented.
Subjects: About 200 high school or college students randomly assigned to treatments.
Methods: Following review of the literature and development of experimental verbal learning sequences, time and error scores, retention, and transfer measures will be obtained. Analysis involves simple comparisons of means and variances.
Duration: September 1963-August 1966.
Investigator(s): Gabriel M. Della-Piana, Ph.D., Associate Professor of Educational Psychology, University of Utah, Salt Lake City, Utah.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

17-F-4 SCHEDULES OF REINFORCEMENT AND DISCRIMINATION LEARNING

Purpose: To investigate effect of changes in reinforcement on object preference. Hypothesis: final preference will be shown for the object increasing in frequency of reinforcement despite initial response strength in favor of the former highly reinforced object.
Methods: Children receive different frequencies of reinforcement of two objects presented successively. In a record stage both objects are presented simultaneously and equally reinforced at a frequency midway between the former values. Measures of object preference, latency of response, and expectancy of reinforcement are made to determine if these changes in percentage of reinforcement systematically affect choice behavior.
Duration: January 1963-March 1964.
Investigator(s): Donald R. Gannon, Ph.D., Assistant Professor of Psychology, Louisiana State University, Lakefront, New Orleans 22, La.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Intelligence, thought, and problem solving

17-G-1 ACCELERATION OF INTELLECTUAL DEVELOPMENT IN EARLY CHILDHOOD

Purpose: To test several untried methods for accelerating young children's acquisition of cognitive skills, including reading, problem-solving sets, and several logical operations.
Subjects: For reading: 40 children aged three years; for problem-solving sets: 60 children in nursery schools, aged four years; for logical operations: varying numbers of kindergarten and nursery school children.
Methods: Pilot studies, followed by comparisons of contrasting experimental groups on standardized or specially developed measures.
Duration: July 1963-June 1966.
Investigator(s): Carl Bereiter, Ph.D., Associate Professor, Institute for Research on Exceptional Children, University of Illinois, Urbana, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles and final reports to Office of Education.

17-G-2 SKEMP AACC TESTS

Purpose: To develop tests suitable for (1) assessment of cognitive abilities of handicapped children; and (2) use with normal children where it is desired to eliminate, so far as possible, effects of previous learning and culture or to obtain a profile rather than an aggregate score.
Subjects: Children, aged 3 to 7 years.
Duration: October 1963-indefinite.
Investigator(s): Richard R. Skemp, Ph.D., Lecturer in Psychology, University of Manchester, Manchester 13, England.
Cooperating group(s): Association for the Aid of Crippled Children.
Publication: Tests will be marketed if reliability and validity are found to be satisfactory.

17-G-3 MEDIATION IN YOUNG CHILDREN

Purpose: To investigate development of mediation and possible sources of deficiency in mediation in order to further understand the process.
Subjects: Groups of 2.5 to 7 year old children.
Methods: Tasks requiring mediation given to subjects. Tasks include transposition, discrimination learning set, perceptual set, acquired equivalence and distinctiveness of cues, and double alternation. In addition to developmental studies relating performance to age, other studies will assess various conditions which on theoretical grounds should facilitate mediation or lead to development of the process.
Investigator(s): Hayne W. Reese, Ph.D., Associate Professor of Psychology, State University of New York at Buffalo, Buffalo, N. Y., 14214.
Cooperating group(s): National Science Foundation.

17-G-4 STIMULUS GENERALIZATION AS A FUNCTION OF MENTAL AGE

Purpose: To study generalization gradients as a function of mental age.
Subjects: 53 children, ages 8 to 9 years.
Methods: Stimulus generalization apparatus.

Findings: Stimulus generalization gradients inversely related to mental age. The lower the M.A., the greater the stimulus generalization responsivity.
Duration: October 1962-September 1963.
Investigator(s): Vincent J. Tempone, Ph.D., Assistant Professor, Department of Psychology, University of New Hampshire, Durham, N. H.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted to Journal of Abnormal and Social Psychology.

17-G-5 EFFECTS OF ANXIETY ON PROBLEM SOLVING AND PAIRED ASSOCIATE LEARNING

Purpose: To investigate the relationship between children's anxiety and response competition in a nonverbal paired associates experiment.
Subjects: 108 of 250 fifth grade boys and girls selected on basis of anxiety scores, and divided equally into three groups--high, medium, and low anxiety.
Methods: Each anxiety group is divided into three subgroups of 12 subjects each. Subgroups are given one of three tasks which involves increasing levels of color dissimilarity between stimulus and response, i.e., three levels of S-R color competition. No subject received more than one task.
Findings: Results suggestive of relationships but not statistically significant. In simplest task, higher anxiety related to better performance; in moderately complex task, medium anxious subjects performed best while low and high anxious subjects showed inferior performance; in most complex task, medium anxious subjects tended to be worse than low and high anxious groups.
Duration: January 1962-December 1964.
Investigator(s): Joseph J. Tecce, Ph.D., Research Fellow, Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md., and Hans G. Furth, Ph.D., Department of Psychology, Catholic University of America, Washington 17, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at American Psychological Association meetings in St. Louis, August 1962; plan publication in Child Development.

Social behavior

17-H-1 RELATIONSHIP OF PRESCHOOL BEHAVIOR TO RETROSPECTIVE REPORTS OF NEONATAL BEHAVIOR

Subjects: Three groups have been studied: one of 32 males, one of 28 females and one of 35 females; another group of approximately 30 males is being studied.
Methods: Retrospective data on sleep and sucking characteristics, tactile sensitivity, and muscle strength are obtained from mothers of two year old children. These children are brought into a research nursery school in groups of five for a period of one month. Their contact behavior with teachers and nature of their play is measured by observations, ratings, and experimental situations. Results are analyzed separately for each sex. One group in each sex serves as a cross-validation group. Additional groups of children are being studied for whom direct measures in the newborn period are available as well as later retrospective information.
Duration: Not reported-1964.
Investigator(s): Richard Q. Bell, Ph.D., Chief, Section on Infant Development, Child Research Branch; George M. Weller, Mary F. Waldrop, Director of Nursery School, and Robert J. Mahon, National Institute of Mental Health,

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Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-H-2 PROGRAM OF RESEARCH ON SOCIALIZATION PROCESSES

Purpose: To study the socialization processes in young children, with particular attention to the ways in which parents, teachers, and peers influence (change and encourage) their behavior. Study will use a continuously available sample of subjects for maximal study purposes in order to investigate concurrently a group of research questions which have considerable overlap in relevant variables. Study will make use of certain core variables measuring: (1) adult actions and values assumed to determine specific responses and general behavioral dispositions of the child; (2) characteristic behavior of the child (usually viewed as the consequent variables); (3) parental responses in reaction to child characteristics; and (4) characteristics of environmental settings influencing behavior.
Methods: Behavioral observations will be obtained in natural and experimental settings. Interviews will be used to secure data on beliefs and values, and on subject's view or perceptions of his experience. Evaluations of different sources and techniques for obtaining data will be made by comparisons of simultaneously recorded data using same or different sources and techniques. One check on methodology will employ the interview by Sears, et al., from Patterns of Child Rearing, and data from this interview will be studied in terms of independently obtained observational measures involving nursery children, their parents, and teacher.
Investigator(s): Marian Radke-Yarrow, Ph.D., Chief, Section on Developmental Psychology, John D. Campbell, Ph.D., Research Psychologist, Roger V. Burton, Ph.D., and Doris E. Hawkins, Social Science Analysts, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Child Research Center.

17-H-3 INDIVIDUAL BEHAVIOR IN GROUPS

Purpose: To determine the relationship, if any, between behavior in groups and responses given in a related study, "Survey of Teenage Attitudes and Interests: Part 2" (17-W-9, Research Relating to Children). Also, to determine the relative effectiveness of counselor's recording of adolescent's behavior in a social group work agency day camp.
Subjects: Total of 70 randomly selected Jewish adolescent girls (N=42) and boys (N=28) who also participated in the attitudes and interests study.
Methods: Use of a rating scale developed by Dr. Irving Canter (Jewish Center Program Aids, March 1946) designed to help in analyzing individual reactions and behavior patterns in a group. Scale includes data on social status, participation, social tendencies, emotional tendencies, general observations, and a summary. Counselors who had completed extensive narrative reports on subjects following use of the scale, were asked to rate the adolescent's behavior with respect to 36 questions, using a score of 1 to 5 for each question.
Duration: August 1963-June 1964.
Investigator(s): Joel M. Carp, B.A., East Flatbush-Rugby YM-YWHA, Associated YM-YWHA's of Greater New York, 1127 East 102nd St., Brooklyn, N. Y. 11236.
Publication: A report should be completed in June 1964, and will be available upon request to the investigator.

17-H-4 CREATIVE THINKING ABILITIES AND PEER CONFORMITY IN FIFTH GRADE CHILDREN

Purpose: To compare peer-conforming behavior of highly creative fifth grade pupils with that of low creative fifth grade pupils in a controlled, small group situation, in relation to: (1) nature of task presented; (2) sociometric composition of group; and (3) interaction, if any, of these variables.
Subjects: A large, suburban, public school system in the Cleveland-Akron area will be chosen, and all fifth grade pupils (about 1,000) will be enrolled in the study.
Methods: A battery of tests of creative thinking, a test of intelligence, and a sociometric nomination form will be administered to subjects. On basis of resultant scores, pupils will be divided into small groups of five members each, including one high- or low- creative pupil. Small groups will then be subjected to Asch-Crutchfield type problem-solving sessions to obtain data on peer conformity.
Duration: October 1963-March 1965.
Investigator(s): Kaoru Yamamoto, Ph.D., Assistant Professor of Education, Kent State University, Kent, Ohio.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education. Partial reports planned in Journal of Educational Psychology, Journal of Abnormal and Social Psychology, and Child Development.

17-H-5 SEX BEHAVIOR STUDY OF VENEREALLY INFECTED TEENAGERS

Purpose: To attempt to determine some of the socio-psycho-economic factors that contribute to a venereal infection, with ultimate plan of attempting to alter promiscuous sex behavior by education and counseling.
Subjects: A teenage venereal disease clinic population in a large urban area.
Methods: Psychiatric depth interviews, case histories, and case follow-ups.
Investigator(s): John W. Lentz, M.D., Chief, Venereal Disease Control Section, Philadelphia Department of Public Health, Philadelphia, Pa. (Reported in Sources of Morbidity Data, 1962.)
Cooperating group(s): Philadelphia Department of Public Health; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A paper will be published by the Public Health Service upon completion of study.

PERSONALITY AND ADJUSTMENT

Assessment of personality

17-J-1 SITUATIONAL TESTING OF SOCIAL PSYCHOLOGICAL VARIABLES IN PERSONALITY

Purpose: To study the efficacy of measuring social variables in personality through "role tests," with performance rated by observers. Study will attempt to replicate earlier findings with a group of juvenile delinquents, and to refine test situations and rating scales. Applications to such practical concerns as identification of delinquent types in order to permit more effective differentiation of their rehabilitation needs are planned.
Methods: Hypothetical situations in which subjects are asked to play role of juvenile court judge and a youth whose friend has stolen money are used. Among variables measured in this way are role-playing facility and concepts of functions of authority held by subjects. The approach through role testing is viewed as an intermediary between formal "objective" and "projective" testing on the one hand, and naturalistic observation of unstructured behavior on the other. It is hoped that study will lead to development of more effective methods for the study of behavior and personality in a natural setting and, ultimately, toward development of more adequate personality theory.
Duration: 1962-1963.
Investigator(s): Jerome Beker, Ed.D., Youth Development Center, Syracuse University, Syracuse, N. Y. (formerly Research Psychologist, Berkshire Farm for Boys, Canaan, N. Y.)
Cooperating group(s): American Academy of Arts and Sciences.
Publication: Planned in late 1964.

17-J-2 PSYCHOLOGICAL TEST PERFORMANCE OF CHILDREN ON A SUBURBAN INDIAN RESERVE

Purpose: To explore validity of certain psychological tests for use with this population, and to describe any idiosyncracies in their development.
Subjects: Children, 9.5 to 11.5 years, attending school on the reserve.
Methods: Group testing with Thurstone Primary Mental Abilities Test; and individual testing of a sample, using Rorschach, Bender, Picture Arrangement subtest of WISC, "Who Are You" enquiry, etc.
Findings: (1) Steady decline in performance from age 9.5 on the Reasoning, Number, and Verbal sections of the PMA, equivalent to a drop of over 10 I.Q. points per year, with r.= -0.814 when two-month age groups are used.
Duration: Spring 1963-1965.
Investigator(s): H. B. M. Murphy, M.D., Ph.D., Associate Professor, and Barbara Wainrib, M.A., Psychologist, Department of Psychiatry, McGill University, Montreal, Que.
Cooperating group(s): Department of Immigration and Citizenship.

Processes and factors in personality

17-K-1 MODALITY PREFERENCE AND BODY IMAGE AMONG CHILDREN

Purpose: To describe the development of visual cue preference from age 3

through 16; to determine whether changes in modality preference are accompanied by corresponding changes in body image.
Subjects: 160 "normal" children.
Methods: Administer techniques designed to measure modality preference and body image. Differences attributable to age and sex are described for visual cue preference and for the level of significance assumed by the eyes in the body image, along with interaction effects.
Investigator(s): Kenneth L. Shewmaker, Ph.D., Clinical Psychologist, Veterans Administration Hospital, 921 N. E. 13, Oklahoma City, Okla.
Cooperating group(s): Veterans Administration.

17-K-2 EFFECTIVENESS OF SENSORY-MOTOR TRAINING IN PROMOTING GENERALIZED BODY IMAGE DEVELOPMENT IN CHILDREN

Purpose: To determine whether intensive sensory-motor training results in generalized body image differentiation in intellectually normal children.
Subjects: 16 intellectually normal public school kindergarten students; a control group.
Methods: Kephart's methods for the training of skills involving postural adjustment, balance, coordination and orientation in regard to the position of the members of the body used to give intensive sensory-motor training to the experimental group; control group given a comparable amount of individualized attention, but within the context of regular classroom activities. Kephart suggests that generalization occurs from specific training tasks to the establishment of a more differentiated body image. If such generalization does occur, subjects trained according to Kephart's procedures might be expected to show improvement in other behaviors which are also postulated to depend on a differentiated body image. This expectation regarding generalization from specific training was tentatively confirmed in a recent pilot study by Ball and Edgar, but number of subjects was too small to permit definite conclusions.
Duration: December 1963-June 1964.
Investigator(s): Thomas S. Ball, Ph.D., and Clara Lee Edgar, M.A., Clinical Psychologists, Pacific State Hospital, Box 100, Pomona, Calif.
Cooperating group(s): Bonita Unified School District; California State Department of Mental Hygiene.
Publication: Publication is planned.

17-K-3 FEARS IN HEALTHY AND HOSPITALIZED CHILDREN

Purpose: To investigate: (1) which concepts arouse fears in healthy children; (2) shifts, if any, in anxiety-proneness of children who are sick, hospitalized, or undergoing surgery; and (3) persistence of any such changes after returning home.
Subjects: Two groups of 100 children each, aged 4 to 8, with similar socioeconomic background; one group healthy, the other hospitalized and undergoing surgery.
Methods: One anxiety index computed for each healthy subject on basis of newly developed test. Similar anxiety indices for hospitalized subjects computed before surgery, after surgery, and four weeks after return home. Group means compared and items analyzed.
Duration: Fall 1963-1965.
Investigator(s): Maria D. Simon, Ph.D., Research Associate, and Hans Strotzka, M.D., Institute for Advanced Studies, Universitatsstr. 7, Vienna 1, Austria.
Cooperating group(s): Ford Foundation.
Publication: Monograph.

17-K-4 RELATIONSHIP BETWEEN SOME FACTORS OF "PARENTAL DEPRIVATION" AND CAPACITY TO DELAY NEED-GRATIFICATION

Purpose: To explore the relationship between some gross parental separation factors (age at initial separation from parent or parents; duration of separation in substitute homes; and number of separation movements) by employing a "retrospective" follow-up approach to test three hypotheses: (1) subjects initially separated between ages of six months to five years will show less delay capacity than subjects separated after age five; (2) there will be a significant negative relationship between duration of separation and delay capacity; and (3) there will be a significant negative relationship between number of separation movements and delay capacity.
Subjects: 103 boys of average intelligence, ages 9 to 12 years, sampled from six Michigan child-care institutions designed to care for "dependent and neglected" children separated from their homes.
Methods: Three measures of delay capacity were individually administered: (1) a story completion technique, devised by the author, consisting of five incomplete stories judged to measure five different needs in relation to gratification delay capacity; (2) Rosenberg-Sutton-Smith Impulsivity Scale; and (3) simple task of delay of gratification.
Findings: Hypothesis (1) was confirmed for the mother. Statistical analyses indicated that age at initial separation from the mother is more critical for the development of delay capacity in preadolescents than is initial separation age from the father. Hypothesis (2) was confirmed for capacity to delay need-affiliation gratification, i.e., the greater the duration of separation, the less the ability to delay need-affiliation gratification. Hypothesis (3): on the whole, frequency of separation movements were not significantly related to delay capacity.
Duration: 1962-June 1963.
Investigator(s): Leonard P. Campos, Ph.D., Assistant Professor of Psychology, University of the Pacific, Stockton 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Study available from Michigan State University microfilm library of doctoral dissertations; other publication planned.

17-K-5 MOTIVATION OF CHILDREN

Purpose: Study of effect of praise and blame on performance of children.
Subjects: 720 Negro and white children of both sexes, of 3 I.Q. levels (low, medium, and high on CTMM), and drawn from 4 grade levels (2, 4, 7, and 10).
Methods: Subjects are given two trials on a 32-card discrimination task. Between trials, subjects are given praise, blame, or a control treatment. Main effects of reward, and interactions will be studied. Analysis of variance (repeated measure type) will be employed in evaluation.
Duration: January-December 1963.
Investigator(s): Wallace A. Kennedy, Ph.D., Assistant Professor, and Hermon C. Willcutt, M.A., Research Assistant, Department of Psychology, Florida State University, Tallahassee, Fla.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Monograph and other publication planned.

17-K-6 DETERMINANTS OF FANTASY AND OVERT AGGRESSION IN CHILDREN

Subjects: Third grade children.

Methods: Subjects were presented with a series of slides depicting children and adults in a variety of aggressive situations and were asked to rate children in the pictures on five point scales of angry, scary, and wrong. A peer nomination inventory was employed to obtain subject ratings of other children on a variety of aggressive behaviors. Data were analyzed for (1) correlations among the three picture sorts; (2) mean rating of pictures as a function of their characteristics (e.g., physical vs. verbal aggression, adult to child vs. child to adult aggression, etc.); and (3) relationships between peer nominations and picture ratings.

Findings: Data indicate that aggression by children to adults is judged to be more wrong than aggression by adults to children. Girls who are judged to be aggressive by their peers tend to rate pictures as more scary than nonaggressive girls, while boys rated by their peers as being aggressive tend to rate children in the pictures as more angry than do nonaggressive boys. Further research is planned to explore this suggestion that there may be sex differences in the dynamics of aggression.

Duration: October 1962-September 1964.

Investigator(s): Leigh M. Triandis, Ph.D., Associate Professor of Psychology, University of Illinois, Urbana, Ill.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-K-7 TRANSMISSION OF AGGRESSION: PEER VS. ADULT MODELS

Purpose: To test the relative influence of peer and adult models in shaping children's aggressive responses.

Subjects: 30 boys and 30 girls from a college elementary and nursery school. Subjects ranged in age from 41 to 76 months with a mean age of 61 months.

Methods: Children were divided into four experimental groups and a control group. Subjects saw the assigned aggression model on film and then were mildly frustrated. The amount of subsequent imitative aggression was scored. The control group was frustrated, but did not see a film prior to scoring their aggressiveness.

Findings: No significant difference was found between the influence of peer and adult models in shaping aggressive responses. Exposure to the films was an effective means of shaping children's aggression. Boys were more willing to imitate the model's behavior than were girls.

Duration: January 1963-June 1964.

Investigator(s): David J. Hicks, Ph.D., Assistant Professor of Psychology, Chico State College, Chico, Calif.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Manuscript submitted to *Journal of Abnormal and Social Psychology*.

17-K-8 GENERALITY OF SOCIAL SCHEMAS IN CHILDREN

Purpose: To investigate the effects of age, sex, and socialization variables on the use of "social schemas" as described by Kuethe.

Subjects: Elementary and secondary school children varying in age, sex, socio-economic level, and "normal" vs. delinquent status.

Methods: Kuethe's procedures, requiring subjects to arrange silhouettes representing human and geometric figures.

Duration: Spring-fall 1963.

Investigator(s): Rae Carlson, Ph.D., Assistant Professor of Psychology, Orange State College, Fullerton, Calif.

Publication: Publication in professional journal planned.

17-K-9 DEVELOPMENT OF CONCEPTS OF PERSONALITY CONSTANCY

Purpose: To study child and adult concepts of interpersonal relations.
Methods: Identification of tacit assumptions children and adults make about other people's behavior, with particular attention to their assumptions about others' benevolence, self-interest, and attitudes; prediction of subject's judgment of another person's strength of motivation, attitude, etc.
Investigator(s): Alfred L. Baldwin, Ph.D., Professor and Head, Department of Child Development, and Nina Lambert, Ph.D., Research Psychologist, New York State College of Home Economics, Cornell University, Ithaca, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-K-10 ACADEMIC COPING PATTERNS OF ADOLESCENTS IN TRANSITION FROM HIGH SCHOOL TO COLLEGE

Purpose: To identify and clarify some principles of adaptive problem-solving behavior as manifested by a sample of adolescents in transition from high school to college.
Subjects: 14 adolescents, selected for competence in academic, social, and interpersonal functioning in their senior year of high school.
Findings: Coping strategies varied with these adolescents. Strategies involved an ability to maintain a sense of worth and develop new sources of self-esteem in the new college culture, as well as an ability to manage anxiety within tolerable limits in the face of new intellectual demands.
Duration: 1959-June 1964.
Investigator(s): George V. Coelho, Ph.D., Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Archives of General Psychiatry* 9:433-443, November 1963.

17-K-11 PERSONALITY STUDIES IN LATE ADOLESCENCE

Purpose: To explore self-concept during late adolescence and its relationship to college choice. To explore stability of self-concept in normal subjects and disturbed patients, as well as relationship between stability of self-concept and perceptual style (field-independence).
Methods: Questionnaire for exploring relationship between self-concept and college preference developed and pretested with two groups of high school seniors. Stability of self-concept studied by administering an adjective check list to 31 normal adolescents and 11 disturbed patients.
Findings: Preliminary findings indicate significant difference in self-concept stability between normal and disturbed groups. Relationship of field-independence variable does not seem consistent with findings previously reported in the literature, using other methods of evaluating stability of self-concept.
Duration: Not reported-1965.
Investigator(s): Earle Silber, M.D., Bruce Sklarew, M.D., Sheldon J. Korchin, Ph.D., Morris Rosenberg, Ph.D., and Jean S. Tippett, Ph.D., Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Emotional and personality disturbances

17-L-1 FOLLOW UP OF CHILDREN WITH ATYPICAL DEVELOPMENT (INFANTILE PSYCHOSIS)

Purpose: To follow longitudinally the complete sample of children diagnosed at preschool age at the Putnam Children's Center as having atypical development (infantile psychosis).
Subjects: Almost 250 children diagnosed since 1943, many of whom were also treated at Putnam Children's Center.
Methods: Follow-up psychiatric visits with child and social work interviews with parents; psychological testing of the child; school and institution reports; EEG reports.
Findings: A cross-sectional summary of follow-up material on 95 percent of the 136 children diagnosed at preschool age who were over 10 on January 1, 1963 showed 59 percent absorbing enough formal learning to compete in society and over half with satisfactory psychological adjustment.
Duration: October 1957-continuing.
Investigator(s): Janet L. Brown, Ph.D., Psychologist, and David E. Reiser, M.D., Director, Putnam Children's Center, 244 Townsend St., Boston 21, Mass.
Cooperating group(s): Scottish Rite Committee on Research in Schizophrenia; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Two articles planned in *American Journal of Orthopsychiatry*.

17-L-2 FOLLOW-UP OF CHILDREN WITH PROBLEMS IN ELEMENTARY SCHOOL

Purpose: To determine number of children who are impaired in their intellectual, social, or emotional development and are deprived of school and community services which might help them overcome or minimize effects of their impairments. To determine whether membership in the group designated as "disturbed" remains constant from year to year; to discriminate between temporary and progressive types of disturbances; and, to find ways to determine early characteristics of children who develop and continue to present patterns of disturbed behavior.
Subjects: Public school children in second, fourth, and sixth grades in Onondaga County, New York in 1960-61 (exclusive of Syracuse City).
Methods: Original data were obtained for 10,000 subjects from routine school records and interviews with teachers in spring of 1961 (*Research Relating to Children*, Bulletin 13). Follow-up of these children was begun in spring of 1963, and a new cohort of second grade children was added. Analytical emphasis is placed on teacher's evaluation of the child. Responses to open-ended interview questions are studied to determine characteristics teachers commonly associate with emotional disturbances.
Findings: Out of 13,800 children in the most recent survey, the number designated by teachers as emotionally disturbed was close to 700, or five percent of total. Ratio of boys to girls was approximately two to one. Further analyses of specific characteristics of these children are in progress.
Duration: June 1960-December 1968.
Investigator(s): Isabel McCaffrey, M.S., Associate Biostatistician, Mental Health Research Unit, New York State Department of Mental Hygiene, 333 E. Washington St., Syracuse, N. Y. 13202.
Cooperating group(s): Onondaga County School Boards Association; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Onondaga County School Studies, Report No. 1*, October 1961. Paper read at joint session of American School Association and American Public Health Association in Kansas City, Mo., November 1963. Specific inquiries may be addressed to the Mental Health Research Unit.

17-L-3 EARLY IDENTIFICATION OF BEHAVIOR PROBLEMS

Purpose: To develop and validate methods applicable in the early identification of behavior problems among adolescents.
Subjects: All students in grades 8 through 12 (approximately 16,000) in Knoxville, Knox County, Tennessee.
Methods: As a part of the National Inventory of Aptitudes and Abilities (Project TALENT), subjects were tested in 1960 with a two-day comprehensive battery of cognitive, noncognitive, and biographical measures. Multivariate analysis will be used to identify patterns of test performance which may lead to early identification of behavior problems. The basis for selection of the study group will be: school grades and tests, truancy, suspension, dropouts, mental health referrals, psychiatric referrals, dependency information, adoption, foster home placement, and juvenile court case records. School, welfare, and social agencies will cooperate in providing these data. Study group will be compared with norms established by the entire Knox Area testing in an attempt to identify critical factors presaging serious mental health problems.
Duration: Not reported-February 1966.
Investigator(s): John T. Dailey, Ph.D., Executive Scientist, Louise W. Cureton, Ph.D., and David B. Orr, Ph.D., Research Scientists, and Kaye S. Thomas, Research Assistant, American Institute for Research, 1808 Adams Mill Rd., N. W., Washington 9, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-L-4 DEVELOPMENT OF DELAYED REINFORCEMENT IN AGGRESSIVE AND NONAGGRESSIVE ADOLESCENTS

Purpose: To test the possibility of developing a fairly high expectancy of receiving delayed reinforcement and thus demonstrate to the subjects that it is possible to work for a delayed reward.
Subjects: 80 emotionally disturbed, average intelligence adolescents, aged 14 to 17, residing in a residential treatment center (Devereux Schools).
Methods: School staff asked to rate subjects on aggressiveness. Use of immediate and delayed reward in a learning situation.
Findings: Indicate that the aggressive adolescent tends initially to prefer immediate reinforcement but can develop positive expectancies regarding probability of receiving a delayed reinforcement and change his preferences accordingly. Further relationships between degree of aggressiveness and choice of delayed versus immediate reinforcement will be explored.
Duration: June 1962-June 1963.
Investigator(s): F. Howard Buss (Ph.D. Candidate), Senior Educational Psychologist, The Devereux Foundation, Devon, Pa.

17-L-5 INCIDENCE OF MAJOR AND MINOR CONGENITAL MALFORMATIONS IN EMOTIONALLY DISTURBED CHILDREN

Purpose: To determine frequency of congenital stigmata in emotionally disturbed children in comparison with the frequency in "normal" children.
Subjects: (1) Inpatients of Children's Unit, Napa State Hospital; (2) controls from large private clinic in nearby city.
Methods: (1) Physical examination of 100 randomly selected patients in each group, with objective measurement, where available, of physical aberrations found; and (2) tabulation and statistical comparison of major and minor physical aberrations found.
Duration: September 1963-June 1964.

Investigator(s): Jesselene H. Thomas, M.D., Napa State Hospital, California State Department of Mental Hygiene, Imola, Calif.
Publication: Will be reported to Research Department, California State Department of Mental Hygiene.

17-L-6 CONTROL OF SIX AND FOURTEEN SECOND EEG POSITIVE SPIKING

Purpose: To examine symptomatology, both physiologic and psychologic, of adolescent and young adult patients admitted to the hospital for treatment of behavioral disorders; to survey all individuals admitted with a diagnosis of behavioral disorder to determine whether or not abnormal EEG rhythms exist. In many instances it has been observed that behavioral disorders are associated with 6 and 14 second positive spiking, an abnormal EEG tracing.
Subjects: It is anticipated that two groups will be under study--one with behavioral disorders and EEG abnormalities and one with behavioral disorders but no EEG abnormalities.
Methods: Subjects with and without EEG abnormalities treated with a combination of a phenothiazine tranquilizer (thioridazine) and an anti-convulsant (diphenylhydantoin), using a double-blind technique with placebo and crossover design with both groups.
Investigator(s): Charles E. Henry, Ph.D., Cleveland Clinic, 2020 E. 93rd St., Cleveland 6, Ohio; Bernard C. Glueck, Jr., M.D., Cornelis Boelhouwer, M.D., and John Donnelly, M.D., Institute of Living, 400 Washington St., Hartford 2, Conn.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-L-7 REPETITIVE MOVEMENTS IN CHILDREN

Purpose: To study the development of repetitive movements in children, their incidence in varying types of mental and physical handicaps as well as in nonhandicapped children; to experimentally evaluate methods of treating severe instances.
Duration: 1963-1965.
Investigator(s): Malcolm B. MacMillan, B.Sc.(W.A), A.B.Ps.S., Psychologist, Children's Cottages, Kew E.4, Victoria, Australia.
Publication: Possibly articles and a book.

17-L-8 REPRESSION OF ANGER AND VERBAL CONDITIONING IN ASTHMATIC AND NORMAL CHILDREN

Purpose: To investigate relationship between repression and reinforcement value of aggressive vs. neutral adults, and hostile vs. neutral content within a verbal conditioning situation; to study relationship between repression and: (1) children's reports of emotional factors as related to asthma; and (2) specific subgroups of asthmatic children.
Subjects: Approximately 80 asthmatic and 80 normal children, 9 to 12 years old.
Methods: Lesser's Pictures Test initially administered. Subjects scoring above and below median are assigned to "high-repressor" and "low-repressor" groups. Members of these groups randomly assigned to eight experimental conditions (in an analysis of variance design), each of which involves conditioning, through verbal approval, hostile vs. neutral content by aggressive or neutral adults. Chi-square tests used to test hypotheses relevant to asthma.

Duration: September 1962-June 1964.
Investigator(s): Ralph Epstein, Ph.D., Department of Psychology, Wayne State University, Detroit 2, Mich. (Reported by Kenneth Purcell, Ph.D., Chief, Psychological Research, Children's Asthma Research Institute and Hospital, Denver 4, Colo.).
Publication: Journal publication is planned.

17-L-9 STUDY OF FACTORS INFLUENCING EGO DEVELOPMENT IN PRIMITIVE CHILDREN

Purpose: To determine which factors promote and which deter development of ego functions in psychotic, deprived, or organically defective children while in the hospital.
Subjects: Primitive children on inpatient service, Children's Psychiatric Hospital, thought to have either functional or organic etiology for their primitiveness.
Methods: Daily logs of psychotherapy, nursing, occupational therapy, recreational therapy, special education including nursery school, and individual instruction employed to study events surrounding child's progress or regress in the hospital. Low judgment items on check lists used several times each day by objective observers as rating scales to provide a quantitative measure of changes in behavior.
Findings: The more investment provided by the staff to the child, the greater is his improvement. Having higher expectations of the child, even if this means actually frustrating his efforts to obtain primitive gratification, has provided considerable improvement in ego functioning, though this may produce occasional transient catatonic-like reactions in the child.
Duration: 1960-indefinite.
Investigator(s): John P. Kemph, M.D., Assistant Professor and Director of Inpatient Service, Children's Psychiatric Hospital, University of Michigan, Ann Arbor, Mich.
Publication: American Journal of Psychiatry, 119:10:934-939, April 1963.

17-L-10 FREE OPERANT CONTROL OF AUDITORY STIMULATION IN AUTISTIC CHILDREN

Purpose: To study factors affecting response to environmental stimulation in autistic children.
Subjects: Psychotic children with marked autistic tendency.
Methods: Operant conditioning using auditory stimuli.
Findings: None expected for one year.
Duration: February 1963-March 1964.
Investigator(s): J. Richard Metz, Ph.D., Clinical Psychologist II, Children's Unit, Camarillo State Hospital, Camarillo, Calif.
Cooperating group(s): California State Department of Mental Hygiene.

17-L-11 COMPARISON OF ULCERATIVE COLITIS AND ENCOPRETIC CHILDREN WITH REGARD TO THEIR PERSONALITY DYNAMICS AS REVEALED ON PROJECTIVE TESTING

Purpose: To determine what differences in psychic organization occur between these two groups of patients.
Subjects: 25 children from each group.
Methods: Analysis of Rorschach and TAT results.
Duration: 1964-1965.
Investigator(s): Bettie Arthur, Ph.D., Instructor in Psychiatry, School of Medicine, University of Michigan, Ann Arbor, Mich.
Publication: To be submitted for publication.

17-L-12 THE EMOTIONALLY DISTURBED CHILD WITH A CONVULSIVE DISORDER

Purpose: To determine the relationship between abnormal brain activity, emotional disturbance, and behavior.
Subjects: Emotionally disturbed children under 18 years referred to Children's Psychiatric Hospital, showing some evidence of organic brain deficit or convulsive disorder.
Methods: Simultaneous recordings during control periods and tape recording of psychiatric interviews of electroencephalogram, galvanic skin response, electrocardiogram, and respiration. This data combined with detailed notes of child's behavior in various situations and the psychopathology as gleaned from clinical interviews and psychological examinations.
Findings: In cases where a relationship between convulsive disorder and emotional disorder can be established (these cases are few), each case must be studied individually because of the wide variation of individual interrelationships between these two disorders. Often abnormal brain waves are reduced in amplitude and frequency by anger or excitement.
Duration: 1960-indefinite.
Investigator(s): John P. Kemph, M.D., Assistant Professor and Director, Inpatient Service, Children's Psychiatric Hospital, University of Michigan, Ann Arbor, Mich.
Publication: Psychosomatic Medicine 15:5:441-449, September-October 1963. "Effects of Psychiatric Interview Upon Paroxysmal Cerebral Activity and Autonomic Measures in a Disturbed Child With Petit Mal Epilepsy," Psychosomatic Medicine, in press. Further data will be reported in Psychosomatic Medicine.

17-L-13 SYMBOLISM AND THOUGHT PROCESSES IN LEARNING INHIBITIONS

Purpose: Investigation of thought processes of intelligent children showing a neurotic inhibition in school learning in early school grades.
Subjects: Children with learning inhibitions, aged 6.5 to 9.5 years. Two comparison groups: a school phobic group without learning problems and a normally achieving group without clinical symptoms.
Methods: Problem of perceptual distortion in reading and writing investigated by constructs that involve both Piaget's formulations about symbolic thought and psychoanalytic theories of impulse and defense. Investigation of processes involved in children's errors in academic work, children's ideas of physical and interpersonal causality, and conditions inducing regression in thought processes.
Duration: 1962-1965.
Investigator(s): George E. Gardner, M.D., Ph.D., Director, Bessie Sperry, Ph.D., Chief Psychologist, and Nancy Staver, M.S.S., Psychiatric Social Worker, Judge Baker Guidance Center, 295 Longwood Ave., Boston 15, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-L-14 THERAPEUTIC PROCESS IN GROUP PSYCHOTHERAPY

Purpose: (1) General aim is to study processes which facilitate or retard personality change during group psychotherapy, with emphasis on kinds of group psychotherapy experiences that lead to constructive change in the mentally ill person and the juvenile delinquent; and (2) to evaluate the generality of such therapeutic changes by simultaneously investigating institutionalized mental patients, institutionalized juvenile delinquents, and mentally ill persons seen in an outpatient psychiatry department. Focus is upon relationship between processes internal to psychotherapy interactions and between these processes and differential constructive personality change.

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Duration: 1961-1965.
Investigator(s): Carl R. Rogers, Ph.D., Professor of Psychology and Psychiatry, and Charles B. Truax, Ph.D., Psychiatric Institute, University of Wisconsin, Madison 6, Wis. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Winter 1962-63.)
Cooperating group(s): Psychiatric Institute, University of Wisconsin.

17-L-15 PATTERNS OF ACTIVITY IN GROUPS OF DISTURBED CHILDREN ATTENDING THE CASEWORK OFFICE OF THE SINGAPORE CHILDREN'S SOCIETY

Purpose: To investigate: (1) whether personal and family background factors are causally related to present behavior patterns of subjects; (2) nature of subjects' response to such group activity opportunity as is provided; and (3) respective contributions of the group worker and family caseworker in "special provision" of this nature.
Duration: 1961-1962.
Investigator(s): C. S. Lee (D.S.W. Candidate, University of Singapore), Sekolah Laki 2, Sungei Besi, Federation of Malaysia. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Summer 1963.)
Cooperating group(s): Singapore Children's Society.

17-L-16 TRANSFERENCE AND COUNTER-TRANSFERENCE EXPERIENCES OCCURRING BETWEEN HOSPITALIZED EMOTIONALLY DISTURBED CHILDREN AND WARD PERSONNEL

Purpose: To determine the nature and kind of emotional problems arising among staff who deal with disturbed children in an inpatient setting.
Subjects: All ward personnel at Children's Psychiatric Hospital, Ann Arbor, Michigan.
Methods: Questionnaire dealing with both a positive and a negative experience occurring within two months immediately preceding date of administration of questionnaire.
Duration: 1964.
Investigator(s): Bettie Arthur, Ph.D., Instructor in Psychiatry, and John P. Kemph, M.D., Assistant Professor and Director, Inpatient Service, Children's Psychiatric Hospital, University of Michigan, Ann Arbor, Mich.
Publication: To be submitted for publication.

17-L-17 PROJECT EDC (EMOTIONALLY DISTURBED CHILDREN)

Purpose: To strengthen and develop services for children with emotional disturbances in San Francisco. One phase of project will include a survey of needs and resources for the care of emotionally disturbed children, aimed at providing a basis for recommendations for social planning and community action in this field.
Methods: Analysis of demographic data, literature, and of previous studies. Interviews with professional community resources personnel, meetings with representatives from various community service agencies (psychiatric clinics, child-care agencies, etc.), compilation of service statistics with assistance from California State Department of Mental Hygiene, observation of programs, and study of agency reports.
Duration: December 1962-February 1964.
Investigator(s): Irving Babow, Ph.D., Research Consultant, United Community Fund of San Francisco, 2015 Steiner St., San Francisco, and Lecturer in Social Welfare, University of California, Berkeley 4, Calif.

Cooperating group(s): San Francisco Foundation; Rosenberg Foundation. Publication: Report will be available from United Community Fund of San Francisco. Article for journal is anticipated.

17-L-18 THE EFFECTIVENESS OF RESIDENTIAL THERAPY WITH CHILDREN

Purpose: A study of the outcome and process of residential psychotherapy. Subjects: Present and former residents of a specific residential treatment center. Methods: Three stages: (1) collecting and organizing file data; contacting for follow-up study; (2) follow-up and outcome evaluation of present behavior in light of past treatment experience; and (3) process of residential therapy. Investigator(s): Stanley I. Berger, Ph.D., Assistant Professor of Psychology, University of New Hampshire, Durham, N. H.

17-L-19 PSYCHO-SOCIAL REPLICATION IN RESIDENTIAL TREATMENT

Purpose: To improve methods for assessing psycho-social replication. The project also has an important treatment component, since there are strongly suggested ties between replication, treatment technique, and outcome. Subjects: 10 cases selected from the children awaiting admission to Linden Hill School, a residential treatment center for disturbed adolescents. Methods: Cases will be studied in the family setting by a series of instruments which test the interpersonal action, perceptual, and affective components of the response pattern evoked by the child. Following this, contingency predictions will be made as to replicative possibilities in the institution and the same measures reapplied after the child has been in the treatment center. Duration: Not reported-1966. Investigator(s): Donald A. Bloch, M.D., Director of Research, Jewish Board of Guardians, 120 W. 57th St., New York 19, N. Y.; Robert A. Rosenthal, Ph.D., Research Psychologist, and Theodore Cherbuliez, M.D., Acting Clinical Director, Linden Hill School, Jewish Board of Guardians, Hawthorne, N. Y. Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-L-20 A SOCIOMETRIC STUDY OF THE CONGRUENCE OF WARD STAFF'S PERCEPTION AND THE ACTUAL STRUCTURE OF AN INPATIENT CHILDREN'S HOSPITAL SETTING

Purpose: To determine the accuracy with which nursing staff, psychiatric aides, and attendants perceive the interpersonal choice-rejection patterns of children on inpatient wards. Subjects: 65 ward personnel and 48 inpatients. Methods: (1) Sociometric choices and rejections made by children; and (2) some information filled out for each child by each staff member. Findings: In general, the staff shows a high degree of reliability and dependability in their assessment of ward structure. Duration: October 1962-fall 1964. Investigator(s): Bettie Arthur, Ph.D., Instructor in Psychiatry, School of Medicine, University of Michigan, Ann Arbor, Mich. Publication: To be submitted for publication.

Delinquency

Note: Some studies appearing in this section were selected from Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency published by the National Council on Crime and Delinquency in New York. Studies thus obtained are noted: (Reported by NCCD.)

17-M-1 POSITIONAL AUTHORITY AND DELINQUENT BEHAVIOR

Purpose: (1) To identify and describe conflicting definitions of roles of police, probation and parole officers (including social workers), teachers, mothers and fathers in preventing juvenile delinquency and treating those who are known to have committed delinquent acts; (2) to attempt to answer questions of relevance to problems of inter-agency conflict, training programs for professional and lay persons concerned with the problem of delinquency.
Subjects: Approximately 1,000 subjects, drawn equally from the populations occupying each role who are known to have direct contact with juvenile delinquents. The study will be carried out in eight southern California Counties (excluding Los Angeles).
Methods: All of the data will be collected in structured, individual interviews. Incumbents of each of these roles will be asked role definition questions (expectations and behavior) about their own and others' roles. In addition, differences in the perception of delinquency causation for three ethnic and three socio-economic groups will be assessed, as well as opinions with respect to the functional responsibilities of each of the five roles investigated for prevention, treatment and apprehension of delinquents.
Duration: June 1963-November 1964.
Investigator(s): Alexander W. McEachern, M.A., Project Head, Youth Studies Center and Visiting Associate Professor, School of Public Administration, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): County probation departments, police agencies, and school systems in Imperial, Kern, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties, California; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Planned in correctional, sociological and psychological journals.

17-M-2 A STUDY OF THE INCIDENCE OF CRIMINALITY AMONG TWINS IN DENMARK

Purpose: To explore interaction between hereditary and environmental factors in the genesis of criminality. To describe twin's development from a social viewpoint, and to explore its significance with respect to their criminal careers.
Subjects: The Institute of Human Genetics has recorded all births of twins in the Danish islands in the period 1870-1910. In Jutland, the Danish peninsula, a similar registration is now being prepared for the years 1870-1920. Study will examine data on twins from the islands for years 1880-1910, and later data on twins from Jutland for period 1880-1920. It is expected that true criminality will be found in approximately 650 individuals.
Methods: Information from Central Police records and criminal records and documentary data are being utilized with respect to 200 individuals having more pronounced criminal careers. Interviews, tests, and psychiatric examinations with subjects.
Investigator(s): Professor Karl O. Christiansen, Assistant Director, Institute of Criminal Science, University of Copenhagen, Copenhagen, Denmark. (Reported by NCCD.)
Cooperating group(s): Institute of Human Genetics.

17-M-3 DEPRIVATION, ALIENATION AND DELINQUENCY IN WASHINGTON, D. C.

Subjects: All youth referred to Washington, D. C. Juvenile Court between July 1959 and March 1962.
Methods: Analysis of subjects in terms of their residential address by socioeconomic areas and racial areas. Simple, partial and multiple correlations computed for census tract analysis. Family data also included. White, mixed and nonwhite neighborhoods analyzed holding SES constant.
Duration: February 1963-February 1964.
Investigator(s): Charles V. Willie, Ph.D., Roy R. Jones, Sulochana Glazer, Anita Gershenovitz, and Myrna Levine, Juvenile Delinquency Planning Board, United Planning Organization, 1420 New York Ave., N. W., Washington 5, D. C. (Reported by NCCD.)
Cooperating group(s): President's Committee on Juvenile Delinquency and Youth Crime.
Publication: "Antisocial Behavior Among Culturally Deprived Youth: Some Observations on Prevention for Teachers," Journal of Negro Education.

17-M-4 RESEARCH PROJECT ON YOUTH PROBLEMS AND JUVENILE DELINQUENCY

Purpose: To investigate problems causing juvenile delinquency; to propose recommendations to cope with and prevent these social problems. To study problems of 60,000 high school students, including 300 intensive case studies.
Duration: March 1961-March 1963.
Investigator(s): Dr. Prasop Ratanakorn, Director, Prasat Neurological Hospital, Bangkok, Thailand. (Reported by NCCD.)
Cooperating group(s): National Research Council of Thailand; Thailand Police Department; Thailand Ministry of Education; Thailand Juvenile Court.

17-M-5 CASE ANALYSIS OF DELINQUENT BOYS RECEIVED BY PETITION AT ALLEGHENY COUNTY JUVENILE COURT DURING 1961

Purpose: To determine basic factors in subject's delinquency, and to what extent being out of school and out of work was characteristic of this group.
Subjects: 165 delinquent boys, 16 to 18 years old, received by petition at Allegheny County Juvenile Court during 1961.
Duration: 1962-1963.
Investigator(s): Patricia Slivinski, and Mabel A. Elliott, Ph.D., Chatham College, Pittsburgh, Pa. (Reported by NCCD.)
Cooperating group(s): Allegheny County Juvenile Court; Chatham College.

17-M-6 JUVENILE DELINQUENTS: THE SUCCESS IMAGE, SELF-IMAGE, AND THE PERCEPTION OF NORMS

Subjects: 90 white juveniles (30 nondelinquents, 30 noninstitutionalized, and 30 institutionalized delinquents).
Methods: Questionnaire with following sections: (1) attitudes toward police, law, property; (2) 4 sets of items measuring respectively prosocial, antisocial, asocial, and pseudo-social attitudes; (3) a set of 37 items responded to in terms of being part of a set of personal success criteria and perceived public success criteria; (4) a set of 37 techniques or attributes that might be important in becoming a success, successively responded to in terms of normative "ought to be relied on," "public does rely on," and "I will rely on;" and (5) a set of 37 skills or attributes responded to in terms of degree

of possession by the respondent.
Duration: July 1960-June 1963.
Investigator(s): Thomas W. Steinburn, Department of Sociology and Anthropology, Western Washington College, Bellingham, Wash. (Reported by NCCD.)
Cooperating group(s): Ford Foundation; University of Washington.

17-M-7 EXAMINATION OF ATTITUDES, VALUES AND BEHAVIOR OF YOUNG ADOLESCENTS WHO HAVE SUBSEQUENTLY BECOME DELINQUENTS, COMPARED WITH A MATCHED CONTROL GROUP

Purpose: To examine how far, prior to becoming delinquent, the young adolescent's outlook, values, attitude toward school, toward the future, relationship to parents, and image of himself differed from those of peers of the same age, sex, I.Q., and social class who did not become delinquent.
Subjects: 600 middle and working class men from the greater London area who participated ten years ago, at the age of 13, in a study of attitudes, values, etc.
Methods: Subjects reinterviewed. Those subsequently on probation or institutionalized questioned on effect of these experiences. A subsidiary study examines the values, outlook, and attitudes at age 13, of those who subsequently become policemen, and compares them with those of a group of delinquents and a group with jobs unrelated to the law in any way.
Duration: 1961-1963.
Investigator(s): Dr. H. Himmelweit, Reader in Psychology, London School of Economics, London, England. (Reported by NCCD.)
Cooperating group(s): Home Office.

17-M-8 THE RELATIONSHIP OF DELINQUENT SELF-CONCEPTION TO ADJUDICATION FOR DELINQUENCY

Purpose: To determine to what extent adjudication for delinquency (in this case appearance before the juvenile court for the first time) is related to the appearance of a delinquent self-concept.
Subjects: (1) Delinquent subjects--boys appearing in the Dane County Juvenile Court for the first time; (2) controls--boys in Dane County schools who are matched with the delinquent subjects in regard to social characteristics and the type of delinquent acts committed, but have not been adjudicated delinquent.
Methods: Study design involves a before and after, longitudinal type inquiry. Delinquent subjects are required to fill out a questionnaire measuring self-concept before adjudication and approximately one month afterward. Control subjects fill out questionnaires at two different times during a comparable time period. Data thus obtained allow assessment of change in self-concept by comparing the before and after measures for each group.
Duration: February 1962-June 1963.
Investigator(s): Virginia Lambert, Ph.D. Candidate, Department of Sociology, University of Wisconsin, Madison, Wis.
Cooperating group(s): Dane County Juvenile Court.

17-M-9 STUDY OF SELF- AND IDEAL SELF-CONCEPTS OF A SMALL GROUP OF INSTITUTIONALIZED GIRLS

Purpose: To test hypotheses that: (1) there will be a low positive or a negative correlation between self- and ideal self-concepts of subjects; (2) self-concepts of subjects are significantly negative or disapproving;

and (3) ideal self-concepts of subjects are significantly positive or approving.
Subjects: Accidental sample of approximately 20 girls in a State institution.
Methods: Administration of a 60-item Q-sort. Correlations between each self- and ideal-self sort will be calculated. An approval-disapproval index will be constructed in order to assign each sort an approval or disapproval rating.
Duration: 1962-February 1963.
Investigator(s): Joanne W. Sterling, Counselor, Girls' Welfare Home, Box 6038, Station B, Albuquerque, N. Mex. (Reported by NCCD.)

17-M-10 PERSONALITY AND SYMPTOMS IN PREADOLESCENT DELINQUENCY

Purpose: To differentiate between the impulse-ridden character disorder and the schizophrenic juvenile delinquent in terms of personality structure, family dynamics, socio-economic factors, and treatment implications.
Subjects: 20 larceny and 20 firesetting delinquent boys under 12 years of age, committed to the Division of Youth Service; latency girls under age 17 who set fires, commit crimes of violence, or commit incest.
Investigator(s): Irving Kaufman, M.D., Research Associate, and research staff, Tufts University, Medford 55, Mass. (Reported by NCCD.)

17-M-11 AGGRESSION IN CHILDREN

Purpose: To discover whether there are, as is widely believed, different types of aggression, and whether people tend to specialize in one or another type.
Subjects: Institutionalized delinquents and third grade boys and girls.
Methods: Peer ratings, self-reports, ratings by adults.
Findings: With measures used and subjects tested, there is little or no tendency for children to specialize in one or another type of aggression, such as verbal, physical, direct, or inquisitive.
Duration: Fall 1961-summer 1962.
Investigator(s): Jerome Laulicht, Ph.D., Canadian Peace Research Institute, Clarkson, Ont. (Formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.). (Reported by NCCD.)
Cooperating group(s): Berkshire Farm for Boys.

17-M-12 FAMILY RELATIONS AND CRIMINAL ACTING OUT

Purpose: Earlier studies have focused on relationships within families which produce only one habitual criminal--the black sheep. The present study deals with family relationships within families which produce many delinquent and criminal sons.
Subjects: Groups of criminal brothers who are serving sentences at the same time; their nondelinquent family members.
Duration: Continuing.
Investigator(s): Dr. Bruno M. Cormier, Miriam Kennedy, Anton Obert, Jadwiga Sangowicz, and Andre Thiffault, Department of Psychiatry, McGill University, Montreal, Que. (Reported by NCCD.)
Cooperating group(s): Dominion-Provincial Grant.
Publication: Canadian Journal of Corrections 1:4:50-55, July 1959; 3:1:18-37, January 1961; 3:4:456-462, October 1961.

17-M-13 AN EXAMINATION OF SOME SUBCULTURAL ASPECTS OF DELINQUENCY

Purpose: To test hypothesis that there are delinquent subcultures in selected areas in Nottingham where delinquency is not regarded as such, and may actually be encouraged.
Subjects: 350 to 500 households in each of two areas of Nottingham, one having history of high delinquency and one with low delinquency. Within the areas, study sections are selected on basis of close geographical proximity but disparate delinquency records.
Methods: Tape recordings are made of semi-structured interviews with subjects. Unit of analysis is the household rather than any particular respondent.
Duration: January 1960-July 1963.
Investigator(s): Dr. A. R. Emerson, W. J. H. Sprott, and D. C. Marsh, Department of Social Science, University of Nottingham, University Park, Nottingham, England. (Reported by NCCD.)
Cooperating group(s): University of Nottingham; Home Office.

17-M-14 THIRTEEN FIGHTING BOYS: A STUDY OF SOCIO-CULTURAL FACTORS INFLUENCING ASSAULTIVE BEHAVIOR

Purpose: To explore and determine socio-cultural factors influencing assaultive behavior; to relate these factors to the adolescent's attitude toward school, his peers, and being a member of a multiproblem family.
Subjects: 13 boys residing in census tract areas 44, 56, and 79 of San Antonio, Texas, who committed an assaultive offense and were referred to the Bexar County Juvenile Office in 1961.
Methods: Analysis of data obtained from the following sources: Bexar County Juvenile Department, Central Index, nine social welfare agencies, and ten public schools. Eleven of the boys were individually interviewed.
Duration: August 1962-May 1963.
Investigator(s): Daniel H. Saucedo, Martin Sundel, Robert Bonovich, Louis Tomaino; and Sister M. Immaculate, Director, Worden School of Social Service, Our Lady of the Lake College, San Antonio 7, Tex. (Reported by NCCD.)
Cooperating group(s): Bexar County Juvenile Department.

17-M-15 DELINQUENT YOUTH AND PUNITIVE COMMUNITIES: A STUDY OF THE BIPOLARIZATION PROCESS IN SERIOUS GROUP DELINQUENCY

Purpose: In a heterogeneous community with ambiguous values and differential access to power, sanctions against the less powerful may be used to clarify and defend the value system of the more powerful. If a subset of the rejected challenges the system by deliberate counter-norm behavior, a cycle of increasing sanctions and increasing resistance may begin. Aim of this project is to study methods for breaking this cycle, considering both the delinquent youth and the punitive community.
Subjects: Four urban areas of high and low delinquency rates: San Juan, Santurce, Rio Piedras, and Ponce. San Juan and Santurce will serve as control communities.
Methods: Pilot studies employ street worker, participant observer, and household survey techniques. Further pilot studies are planned leading eventually to a test period of suspension of all sentences to reform schools for youths from the experimental communities. Small group experiments are being used to duplicate community processes in a laboratory setting.
Duration: July 1962-July 1963 (pilot phase).
Investigator(s): Howard R. Stanton, Director, Social Science Program, and staff, Insular Department of Health, San Juan, P. R. (Reported by NCCD.)
Cooperating group(s): Puerto Rico Children's Commission; Russell Sage Foundation.

17-M-16 STUDY OF THE ADOLESCENT GIRL IN CONFLICT

Purpose: To better understand the disturbed and delinquent girl in the North American culture; to improve practice and programs trying to help the girl in conflict.
Subjects: Emotionally disturbed or adjudicated delinquent girls in institutional placement, and (later) girls in the community.
Methods: Tape recorded interviews, diaries or letters, if available, and group discussions. Social group work method singled out for special attention and evaluation.
Duration: 1962-continuing.
Investigator(s): Gisela Konopka, D.S.W., Professor of Social Work, University of Minnesota, Minneapolis 14, Minn. (Reported by NCCD.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Children 11:1:21-26, January-February 1964.

17-M-17 A STUDY OF THE FEMALE YOUTHFUL OFFENDER IN NEW YORK CITY

Purpose: To collect and study data on a selected population of female youthful offenders and to delineate in detail the characteristics of the group; to compare psychiatric with nonpsychiatric offenders; to do a follow-up study on samples of all types of offenders, determining rates of recidivism and other pertinent factors.
Subjects: Selected from 5862 cases of female youthful offenders, 37% of whom were examined in the Psychiatric Division of Bellevue Hospital.
Investigator(s): Arthur Zitrin, M.D., and Andrew K. Bernath, Psychiatric Division, Bellevue Hospital, First Ave. and 27th St., New York, N. Y. (Reported by NCCD.)
Cooperating group(s): New York University Medical Center.

17-M-18 NATURE AND ROLES OF FEMALE DELINQUENT GANGS

Purpose: (1) To investigate the roles of female gang members in the delinquent behaviors of associated male gangs; (2) to investigate social, developmental, personality and behavioral characteristics of female gang members; and (3) to investigate history and structure of female gangs.
Subjects: 125 or more members of female delinquent groups, associated with four large Negro male gangs already under study in Los Angeles.
Methods: In cooperation with detached workers assigned by the Los Angeles County Probation Department the study will include: observation; interviews; collection of police, court, probation, school and health records; comparisons with matched control girls.
Duration: September 1963-December 1965.
Investigator(s): Malcolm W. Klein, Ph.D., Project Head, Youth Studies Center, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): Los Angeles County Probation Department; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles and reports when and where appropriate.

17-M-19 YOUTHFUL DELINQUENT BEHAVIOR OF RESPECTABLE MEN

Purpose: To study, in retrospect, reports of the youthful behavior of responsible men which might very well have been labelled "delinquent."

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Methods: Three geographical areas are under study: (1) Glen Cove on Long Island, a community of 24,000 persons representing a variety of socio-economic and ethnic backgrounds, was chosen for a five percent area probability sample of households; (2) in the north end of Boston, having predominantly Italian and Irish residents, 100 householders in an area probability sample will provide comparisons of experiences and opportunities to which similar ethnic groups were exposed in growing up in a crowded metropolitan working class district, in contrast to growing up in Glen Cove; and (3) in Baton Rouge, Louisiana, interviews with 50 clergymen and 50 lawyers will provide data on occupational differences with respect to delinquent behavior and attitudes toward misbehavior of today's youth. An extensive interview schedule permits an earlier and more definite involvement of respondent in recalling his youthful delinquent behavior and offering constructive suggestions for youth today. The Bureau of Social Research, Columbia University will assist in coding and processing data on IBM cards.
Duration: October 1961-September 1964.
Investigator(s): Sophia M. Robison, Ph.D., Director, Career Patterns Project, Adelphi University, Garden City, L. I., N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Report on exploratory phase of project will be available in late summer, 1964.

17-M-20 AN ACTION-RESEARCH PROJECT FOR THE PROVISION OF INFORMATION ON THE FORCES ACTING IN "STREET CORNER GROUPS"

Purpose: To determine social and economic background from which members of "street corner groups" derive; to identify their special needs, which contribute to formation of groups with asocial behavior and interfere with their integration into normal society.
Subjects: Youths, 14 to 18 years, belonging to "street corner groups."
Methods: Four detached group workers, assigned to "street corner group" environments, will attempt to join the groups and follow accepted rules of behavior. Later they will endeavor to guide the groups toward positive social behavior and an eventual transfer into accepted group settings.
Duration: October 1962-October 1965.
Investigator(s): Karl Frankenstein, Yona Cohn and Batia Mintal, and H. Kahn, Israel Ministry of Social Welfare, Jerusalem, Israel. (Reported by NCCD.)
Cooperating group(s): Tel-Aviv City Welfare Department; Hebrew University; Social Security Administration, U. S. Department of Health, Education, and Welfare.

17-M-21 FROM GANG VIOLENCE TO HEROIN USE AMONG STREET ADOLESCENTS

Purpose: To describe and explain the shift from gang violence to heroin addiction in delinquency occurring over a five year period (1956-1961) in the Yorkville section of Manhattan.
Methods: Secure and analyze cultural, social, and psychological data to identify sources of pressure and conflict related to individual predispositions toward violence and heroin addiction. Much data is already available through five years of participant observation in the project area. Theory of "Adaptational Psychodynamics" used as framework for analyzing data.
Duration: 1962-continuing.
Investigator(s): Edward Preble, Professor, New York School of Psychiatry, 600 East 125 St., New York, N. Y. (Reported by NCCD.)
Cooperating group(s): New York School of Psychiatry; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-M-22 ETIOLOGY OF NARCOTIC INVOLVEMENT IN YOUTH AUTHORITY WARDS

Purpose: To explore manner in which narcotic-involved Youth Authority wards become introduced to illegal drug use. To investigate personal and social correlates of continued drug involvement.
Subjects: Selected wards from Preston School of Industry.
Methods: Names of wards entering Preston with histories of prior narcotic involvement are provided by classification staff. Wards are screened for suitability as candidates for a series of panel or sequential interviews. Selected subjects are interviewed periodically to establish rapport and obtain life histories, with emphasis on introduction to and involvement with narcotics. Interviews tape recorded for later transcription and analysis.
Duration: 1961-continuing.
Investigator(s): Dorothy Zietz, Ph.D., and Keith S. Griffiths, Ph.D., Chief, Research Division, California Department of Youth Authority, 401 State Office Bldg. No. 1, Sacramento 14, Calif. (Reported by NCCD.)
Cooperating group(s): California Department of Youth Authority.
Publication: Adams, S. and Zietz, D., Patterns of Narcotic Involvement: The Autobiographies of Five Juvenile Offenders, Research Report No. 28, Department of Youth Authority, February 1962.

17-M-23 EVALUATION RESEARCH OF POST-INSTITUTIONAL PERFORMANCE OF DISCHARGEES FROM ADOLESCENT AND ADULT NARCOTICS ADDICTION WARDS OF METROPOLITAN HOSPITAL

Purpose: To study continuities and discontinuities in the process of patient care for narcotic addicts in a hospital ward service.
Subjects: 250 patients randomly selected from hospital admissions over the course of a year; sample of staff on narcotics service.
Methods: Patients interviewed once upon admission, once during hospitalization, and once after discharge; interviews with sample of professional and nonprofessional staff on the narcotics service. Participant observations conducted of patients and staff.
Findings: Patients vary widely in degree of conventionality; four different life style adaptations observed consisting of conventional and criminal patterns of behavior; staff on narcotics service hold ambivalent attitudes towards addicts; an action research program on narcotics addiction seems well suited to the development of a program of medical education, research, and service in community psychiatry.
Duration: July 1961-June 1964.
Investigator(s): Richard Brotman, Ph.D., Director, Division of Community Mental Health, Department of Psychiatry, New York Medical College, New York, N. Y.
Cooperating group(s): Health Research Council.

17-M-24 SEXUAL DELINQUENCY IN GIRLS

Purpose: Hypothesis: Bio-psychological or socio-cultural precocity favors delinquent sexual patterns in girls.
Subjects: 50 sexually delinquent girls; smaller control group of nonsexually delinquent girls.
Methods: Search for biological and sociological components of precocity in both groups, using official records as main source. Psychological testing (Murray, Rorschach, Porteus Maze, I.Q.) used to integrate the data in a clinical approach. Interviewing techniques will then be designed.
Duration: October 1961-1964.
Investigator(s): Jean Constant, Guy Houchon, Suzanne Moreau, G. Goosens, and M. Beyers, Ecole de Criminologie, Universite de Liege, rue Ch. Magnette 2,

app. 4c, Liege, Belgioque. (Reported by NCCD.)
Cooperating group(s): Schools of Law and Criminology, University of Liege; Foundation for the Protection of Children (Establissement de la Protection de l'Enfance).

17-M-25 STUDY OF CAR THEFTS BY JUVENILES

Subjects: Juveniles sentenced to St. John's Training School for car stealing.
Methods: Interviews with subjects; collection of data from files of Juvenile and Family Court, Toronto. Statistical evaluation of data. Factors relating to subjects' familial background, educational and socio-economic level, and personal history will be investigated.
Duration: December 1962-July 1963.
Investigator(s): M. D. Tutchie, M.D., Director, and J. W. Mohr, Forensic In-Patient Unit, Toronto Psychiatric Hospital, 2 Surrey Place, Toronto, Ont. (Reported by NCCD).
Cooperating group(s): St. John's Training School.

17-M-26 A MULTIDISCIPLINARY COMPARISON OF JUVENILE AUTO THIEVES AND JUVENILE BURGLARS

Purpose: To uncover any systematic differences between juvenile auto thieves and other juvenile thieves.
Subjects: First offenders coming before the court in a district of the greater Boston area.
Methods: Structured interviews, questionnaires, and psychological tests used to systematically explore such factors as school adjustment, family organization, personality dynamics, birth order, and juvenile's value-attitude orientation.
Duration: March 1962-continuing.
Investigator(s): William R. Shelton, M.D., Gene Bocknek, George W. Rever, Dorothy F. Rowell, M.S.W., Probation Officer, and Ruth S. Stone, Probation Officer, Cambridge Court Clinic, Third and Spring St., Cambridge 41, Mass. (Reported by NCCD.)
Cooperating group(s): Boston University Law-Medicine Research Unit; East Cambridge 3rd District Court.

17-M-27 THE MEASUREMENT OF DELINQUENCY

Purpose: To devise an index or indices to juvenile delinquency that can be used to measure changes in such delinquency and the effectiveness of preventive programs.
Subjects: 10 percent sample of all offenses committed by juveniles 7 to 17 years of age in Philadelphia during 1960 and known to the police.
Duration: September 1960-August 1963.
Investigator(s): Thorsten Sellin, Ph.D., Professor of Sociology, and Marvin E. Wolfgang, Ph.D., Associate Professor of Sociology, University of Pennsylvania, Philadelphia 4, Pa. (Reported by NCCD.)
Cooperating group(s): Ford Foundation.

17-M-28 FACE VALIDITY IN THE Pd SCALE OF THE MINNESOTA MULTI-PHASIC PERSONALITY INVENTORY

Purpose: To determine whether items on the Pd scale of the MMPI rated *a priori* as "face valid" differentiate clinically defined psychopathy among delinquent boys better than items rated *a priori* as "congruent" and "irrelevant", and whether the "congruent" items differentiate psychopathy better than the "irrelevant" items.
Subjects: Two groups of delinquents clinically classified as psychopathic and nonpsychopathic on the basis of Cleckly's (1959) diagnostic criteria.
Methods: MMPI administered to subjects. Cleckly's diagnostic criteria used to classify items of the Pd scale *a priori* as (1) face valid, (2) congruent or consistent with psychopathy, and (3) irrelevant or inconsistent with psychopathy.
Duration: June 1961-continuing.
Investigator(s): Jo Anne H. DeHaven, Psychiatric Clinic, Hamilton County Juvenile Court, 2020 Auburn Ave., Cincinnati 19, Ohio. (Reported by NCCD.)
Cooperating group(s): Hamilton County Juvenile Court; Glenview School.

17-M-29 RELATIONSHIP BETWEEN RECIDIVISM AND VARIOUS ATTITUDES AND BEHAVIORS

Purpose: To determine which of the independent variables in the study (e.g., aggression, anomie, attitude toward authority, sociometric status, etc.) relate to recidivism.
Subjects: 140 boys at Berkshire Farm.
Methods: Measure variety of attitudes and behaviors of subjects. Follow-up for one year after discharge from Berkshire Farm to determine whether or not they were arrested, convicted of crime, or recommitted to correctional facilities.
Duration: Fall 1961-summer 1962.
Investigator(s): Jerome Laulicht, Ph.D., Project Director, Canadian Peace Research Institute, Clarkson, Ont. (formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.) (Reported by NCCD.)
Cooperating group(s): Berkshire Farm for Boys.

17-M-30 RECIDIVISM AND BEHAVIOR DURING COMMITMENT TO A TRAINING SCHOOL

Purpose: To test hypothesis that there is no relationship between behavioral adjustment in a training school environment and recidivism after discharge.
Methods: Behavior is assessed in terms of number of runaways, number of conduct reports, and group honor roll status (a monthly summary measure of degree of "antisocial" behavior).
Duration: Summer 1961-summer 1962.
Investigator(s): Jerome Laulicht, Ph.D., Project Director, Canadian Peace Research Institute, Clarkson, Ont. (formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.) (Reported by NCCD.)
Cooperating group(s): Berkshire Farm for Boys.

17-M-31 CRIME PREVENTION AND PRIMARY SCHOOL CHILDREN

Purpose: To assess when and how the social inadaptation that may later result in delinquent behavior could be noticed in school children; to pave the way for preventive work with such children.
Subjects: 2,617 children, 8 to 9 years old, attending the second grade of

primary school in 1954-1955.
Methods: Follow-up of school results of subjects through 1960-1961 when they finished their schooling; visits to families on a sample basis by social workers; development of eventual troubles recorded by social welfare bodies and by police.
Duration: June 1962-December 1963.
Investigator(s): Dr. Bronislav Skaberne, Katja Vodopivec, Marijan Blejec, Vinko Skalar, and Boris Uderman, Institut za Kriminologijo pri Pravni fakulteti v Ljubljani, Trg revolucije st. 11, Jugoslavija. (Reported by NCCD.)
Cooperating group(s): Council for Education and Council for Social Welfare of the People's Republic of Slovenia; Boris Kidric Research Fund.

17-M-32 THE SCHOOL'S ROLE IN PREVENTING DELINQUENCY

Purpose: To reduce incidence of delinquency over a period of years.
Subjects: 13 year old boys and girls at an English comprehensive school.
Methods: Series of lessons on human relationship problems given to subjects once a week. Comparison is made of results with suitable control groups. Objective tests are in the process of being worked out.
Duration: 1962-continuing.
Investigator(s): Dr. R. G. Andry, Psychology Department, Institute of Education, University of London, London W. C. 1, England. (Reported by NCCD.)

17-M-33 JUVENILE DELINQUENCY FIELD DEMONSTRATION AND TRAINING PROJECT

Purpose: To test the concept that an approach to the solution of delinquency problems in suburban areas requires an effective combination of three basic kinds of child and family treatment services, namely: (1) casework services; (2) psychiatric and psychological clinical services; and (3) services which emphasize corrective and educational methods of treatment, i.e., group work, remedial education, on-the-job counseling, vocational guidance, etc.
Subjects: Three groups of 50 children each selected through application of predictive scales and clinical criteria. Groups will receive varying levels of treatment as follows: group (1), control; group (2), limited service; and group (3), full service group receiving services outlined above. Graduate students will be used in the training phase, as well as teachers, probation officers, and juvenile police officers.
Duration: September 1961-September 1967.
Investigator(s): George E. Gardner, M.D., Ph.D., Director, Elizabeth S. Makkay, M.D., and David Ricks, Ph.D., Research Psychologist, Judge Baker Guidance Center, 295 Longwood Ave., Boston 15, Mass; and Edward Landy, Ed.D., Assistant Superintendent, Newton Public Schools, Newton, Mass. (Reported by NCCD.)

17-M-34 PREDICTIVE UTILITY OF THE JUVENILE COURT PREHEARING REPORT: A FIVE YEAR FOLLOW-UP STUDY

Purpose: (1) To determine relative importance of various types of data used in making a disposition about a child in juvenile court; and (2) to study ability of making predictions by professional persons (probation officers, juvenile court judges, clinical psychologists) from the prehearing report concerning disposition, recidivism and social adjustment.
Subjects: Complete prehearing reports from Hennepin County Juvenile Court selected randomly for boys who were ages 16 or 17 in 1957 (N=30). Clinical

judges will be experienced probation officers, juvenile court judges, and clinical psychologists.
Methods: (1) Each boy in the sample who appeared in juvenile court in 1957 will be interviewed to obtain present adjustment data; (2) court records, probation reports and institutional reports will be used to ascertain disposition, recidivism and adjustment; (3) clinical judges will be asked to predict: court disposition in 1957, probation adjustment and violation, institutional adjustment, recidivism, military service adjustment, occupational adjustment, marital adjustment, community participation, recreation pursuits, personal problems, and need for psychotherapy. Predictions will be made for each section of prehearing report, and for entire report.
Duration: October 1962-August 1963.
Investigator(s): Seymour Z. Gross (Ph.D. Candidate), Clinical Psychologist, Hennepin County Mental Health Center, 619 S. 5th St., and Robert D. Wirt, Ph.D., Director, Center for Personality Research, University of Minnesota, Minneapolis, Minn.
Cooperating group(s): Hennepin County Court Services.

17-M-35 AN EVALUATION OF DETACHED WORK AS A METHOD OF REDIRECTING DELINQUENT STREET CORNER GROUPS

Purpose: To discover the degree of utility of detached workers in redirecting delinquent youths.
Subjects: 500 adolescents and 6 detached workers involved in Boston area detached work programs.
Methods: Administration of attitude scales including California Psychological Inventory, Who Am I test, and sociometrics of several types. Interviews with adolescents and detached workers. Compilation of complete record of delinquent activities of each boy as project proceeds.
Duration: October 1962-June 1964.
Investigator(s): Dr. Theodore N. Ferdinand, Assistant Professor, Department of Sociology and Anthropology, Northeastern University, Boston 15, Mass. (Reported by NCCD.)
Cooperating group(s): Boston YMCA; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-M-36 EFFECT OF A TRANQUILIZER UPON THE BEHAVIOR OF INSTITUTIONALIZED DELINQUENT BOYS

Subjects: 90 first admissions to the Wisconsin School for Boys, divided equally into three groups and matched for age, intelligence, and race.
Methods: Double blind technique. Group (1) received experimental drug for first six weeks, placebo for second six weeks, and no treatment during last six weeks. Group (2) received placebo for first six weeks, experimental drug for second six weeks, and no treatment during last six weeks. Group (3) received no treatment during entire 18 weeks.
Duration: 1959-1962.
Investigator(s): Asher R. Pacht, Ph.D., Chief Psychologist, Richard P. Youniss, Ph.D., William Peterson, Ph.D., George Messinger, and James E. Cowden, Psychiatric Services, Wisconsin Division of Corrections, 270 State Office Bldg., Madison, Wis. (Reported by NCCD.)

17-M-37 A COMPARISON OF CHARACTERISTICS OF INSTITUTIONALIZED NEGRO AND WHITE DELINQUENTS

Purpose: To compare Negro and white boys in terms of characteristics, family background, behavior while at institution, previous delinquency histories, etc.
Methods: Data collected from institution records; findings compared with those of at least one previous study by another investigator.
Duration: 1961-1962.
Investigator(s): Jerome Laulicht, Ph.D., Project Director, Canadian Peace Research Institute, Clarkson, Ont. (formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.) (Reported by NCCD.)
Cooperating group(s): Berkshire Farm for Boys.

17-M-38 EXPLORATORY STUDY OF POPULATION CHARACTERISTICS AT THE NATIONAL TRAINING SCHOOL FOR BOYS

Purpose: First of a proposed series of projects to investigate problems represented by boys aged 13 to 19 committed to National Training School for Boys, a Federal institution.
Subjects: 200 boys discharged from the school.
Methods: Collection, coding, and intercorrelation of approximately 250 bits of information on each boy. Information includes background, nature of offense, personality characteristics, and institutional adjustment. Later, attempts will be made to obtain follow-up data on same subjects.
Duration: July 1962-June 1963.
Investigator(s): F. Patrick McKegney, M.D., and Kenneth R. Strawberry, National Training School for Boys, Washington 13, D. C. (Reported by NCCD.)
Cooperating group(s): Federal Bureau of Prisons, U. S. Department of Justice.

17-M-39 PERSONALITY OF THE JUVENILE OFFENDER AS COMPARED TO THE OFFENSE HE COMMITS

Purpose: To determine if certain classes of offenders are more delinquency prone than others.
Subjects: 340 boys committed to Minnesota Juvenile Reception Center, October 1961 to July 1962.
Methods: Test for high delinquency proneness using a profile scored on the MMPI. Each boy classified according to offense upon commitment to the Center using the following offense classes: assault, sex crime, robbery, burglary, car theft, larceny, liquor offense, curfew offense, absenteeism, truancy, and incorrigibility; one category for those committing two or more crimes.
Duration: June 1962-April 1963.
Investigator(s): Charles L. Newman, M.P.A., Professor and Director, Frank Rossel, and Robert Fredell, Program of Correctional Training, Kent School of Social Work, University of Louisville, Louisville, Ky. (Reported by NCCD.)
Cooperating group(s): Minnesota State Department of Corrections.

17-M-40 TYE TYPOLOGY OF DELINQUENCY

Purpose: To discover whether there are any distinct characteristics that would typify a theif, an absconder, a sexual offender, etc.
Subjects: 957 boys admitted to State approved schools in Finland and investigated at the Jarvilinna Receiving Center between 1947 and 1956.
Duration: 1955-1962.
Investigator(s): Erkki Saari, Ph.D., Leppavesi, Finland. (Reported by NCCD.)
Cooperating group(s): School of Social Sciences, Tampere, Finland.

17-M-41 TYPOLOGY OF INSTITUTIONALIZED DELINQUENTS

Purpose: To validly classify delinquents and to attempt to draw implications for the best forms of treatment for each type.

Subjects: 140 boys at Berkshire Farm.

Methods: Measures of variety of attitudes and behaviors administered to subjects. Factor analyses used to reduce the large number of measures to meaningful clusters.

Duration: 1960-1962.

Investigator(s): Jerome Laulicht, Ph.D., Project Director, Canadian Peace Research Institute, Clarkson, Ont. (formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.) (Reported by NCCD.)

Cooperating group(s): Berkshire Farm for Boys.

17-M-42 DIAGNOSTIC TYPOLOGIES FOR DISTURBED DELINQUENT GIRLS IN A RESIDENTIAL TREATMENT CENTER

Purpose: To develop a diagnostic classification for use by social casework staff to assign youngsters more effectively to appropriate treatments.

Subjects: Approximately 200 girls from Las Palmas School for Girls, median age 16, primarily Caucasian with some Negroes and Mexican-Americans.

Methods: Psychological inventories, psychiatric and I-level diagnoses, clinical and social work interviews. Data processed by factor analysis, Q-analysis, and possibly latent class analysis in search for clusters or groupings that have more meaning for treatment assignment than existing classifications now in use at Las Palmas.

Duration: October 1963-October 1965.

Investigator(s): Stuart Adams, Ph.D., Research Director, and Edgar W. Butler, M.A., Research Analyst, Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Research reports will be released by the Research Office, Los Angeles County Probation Department.

17-M-43 SURVEY OF TYPES OF JUVENILE DELINQUENTS DIAGNOSED AT THE "MESILAH" OBSERVATION CENTER IN JERUSALEM

Subjects: 120 juvenile delinquents observed and diagnosed over a two year period.

Methods: Relationship between the following variables investigated by statistical analysis: (1) type of disturbance; (2) ethnic origin of delinquent; (3) age at immigration, if applicable; (4) sibling order; (5) size of family; (6) wave of immigration; and (7) socio-economic status of father.

Findings: Deep personality disorders were more frequent in higher socio-economic strata, regardless of ethnic groups, in accordance with research results in other countries. Significantly less deep personality disorders were found among juvenile delinquents from Arab countries. Significantly more deep personality disorders were found among subjects who immigrated at five years of age and below.

Duration: 1961-1962.

Investigator(s): Reuven Kohen-Raz. (Information supplied by Mrs. H. Kahn, Head, Foreign Relations Division, Ministry of Social Welfare, Jerusalem, Israel, and reported by NCCD).

Cooperating group(s): Ministries of Health and of Social Welfare.

17-M-44 DIFFERENTIAL SOCIALIZATION: THE DELINQUENT VERSUS THE NONDELINQUENT

Purpose: To examine several components of self held by institutionalized delinquents, lower class ninth graders, and middle class ninth graders. To test, in a limited way, validity of Cohen's as well as Cloward and Ohlin's contentions that delinquent boys, being of the working class, reject middle class values, and feel limited in opportunity.

Subjects: 515 boys at Boys' Industrial School, Lancaster, Ohio; 61 ninth grade boys in a lower class school, and 68 ninth grade boys in a middle class school, the latter two in Columbus, Ohio.

Methods: Instrument containing scales designed to measure socialization, self-concept, value orientation, and awareness of limited opportunity, was completed by subjects.

Duration: Not reported-August 1962.

Investigator(s): Frank R. Scarpitti, Ph.D., Director, Institute Treatment Center, 1158 South 3rd St., Louisville 3, Ky. (Reported by NCCD.)

Cooperating group(s): Ohio State University.

17-M-45 IDENTIFICATION OF INDIGENOUS LEADERSHIP OF INSTITUTIONALIZED DELINQUENT YOUTH, ITS ROLE AND INFLUENCE ON THE PEER GROUP

Purpose: To study indigenous peer group leaders of delinquent youth in institutions, and criteria for their selection; to measure strength of their importance in order to have more data on the possibility of reaching each individual member of the group by institution personnel; and to experiment with methods of utilizing such leadership for rehabilitative purposes.

Duration: 1963-continuing.

Investigator(s): Rachel Hutner and L. Jaffe. (Information supplied by Mrs. H. Kahn, Head, Foreign Relations Division, Ministry of Social Welfare, Jerusalem, Israel, and reported by NCCD).

Cooperating group(s): Ministry of Social Welfare; Hebrew University.

17-M-46 COTTAGE SIMILARITIES AND DIFFERENCES IN A TRAINING SCHOOL: DIFFERENCES IN BACKGROUND, CHARACTERISTICS AND BEHAVIOR OF BOYS IN VARIOUS COTTAGE UNITS

Purpose: It is hypothesized that there are significant differences among boys assigned to various cottages in one training school. However, it is expected that there are similarities among boys in several cottages, or "clusters" of cottages.

Methods: Data collected from institution records and questionnaires measuring various attitudes and behavior. Attempt will be made to assess relevance of any obtained differences to different recidivism rates of boys from various cottages.

Duration: Spring 1961-winter 1962.

Investigator(s): Jerome Laulicht, Ph.D., Project Director, Canadian Peace Research Institute, Clarkson, Ont. (formerly Research Director, Berkshire Farm for Boys, Canaan, N. Y.) (Reported by NCCD.)

Cooperating group(s): Berkshire Farm for Boys.

17-M-47 ADJUSTMENT, OBSERVED AND MEASURED, OF DELINQUENTS IN A SHORT-TERM TREATMENT INSTITUTION

Purpose: To determine whether there is a relationship between observed adjustment (staff evaluated) and measured adjustment, using the California

Test of Personality, Intermediate Series. To determine whether significant changes in personal and social adjustment (as measured by the California Test) could be effected during periods of institutionalization under nine months.
Subjects: 50 boys institutionalized from one day to seven months.
Methods: Boys given California Test and simultaneously evaluated by institutional staff. Process then repeated after a two-month interval.
Findings: No significant correlation between observed and measured adjustment. No significant difference between levels of adjustment of groups institutionalized for varying periods up to nine months. Conclusion: no significant change can be effected among most youngsters institutionalized for less than nine months.
Duration: June 1962-April 1963.
Investigator(s): Jerome M. Tashbook, 620 W. Ormsby Ave., Louisville 3, Ky. (Reported by NCCD.)
Cooperating group(s): Kent School of Social Work, University of Louisville; Youth Development Center, Canonsburg, Pa.; Office for Children and Youth, Commonwealth of Pennsylvania.

17-M-48 RELATIONSHIP OF PSYCHOSOCIAL VARIABLES TO INSTITUTIONAL AND POST-INSTITUTIONAL ADJUSTMENT

Purpose: To obtain norms on tests and ratings for boys passing through the Wisconsin School for Boys. To refine these scales and ratings to differentiate effectively among the youths. To determine predictive value of these tests and ratings with respect to each boy's institutional and post-release adjustment.
Methods: Determination of norms for a sample of boys on 35 "predictor" and 2 "criterion" variables. "Predictor" variables include age, I.Q., hostility, anxiety, guilt, dependency, degree of disturbance, identification, family relations, etc. "Criterion" variables are ratings of institutional and post-release adjustment.
Duration: September 1960-continuing.
Investigator(s): Asher R. Pacht, Ph.D., Chief Psychologist, Wisconsin Division of Corrections, 270 State Office Bldg., Madison, Wis.; James E. Cowden, Ph.D., and William Peterson, Ph.D., Senior Psychologist, Wisconsin School for Boys, Wales, Wis. (Reported by NCCD).

17-M-49 CLINTON COUNTY RETROSPECTIVE NEED STUDY

Purpose: To determine magnitude of need for a New York State Division for Youth START (Short Term Adolescent Resident Training) Center in Clinton County.
Subjects: Youth placed on probation for first time during the year July 1, 1960 to June 30, 1961.
Methods: Data collected from probation and school records were processed to provide special analyses.
Duration: July-October 1962.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

17-M-50 AN EVALUATION OF THE START CENTER PROGRAMS AT MIDDLETOWN, BRENTWOOD, AND AUBURN

Purpose: This research will evaluate effectiveness of the START programs. START (Short Term Adolescent Resident Training) is a resident program limited to 20 youth, providing work experience and counseling for an average of four

months. Work experience is designed to develop wholesome work habits and attitudes. Counseling is designed to foster insight into underlying dynamics of forces facilitating delinquency and thereby modify values and behavior.
Subjects: Boys referred by courts to START Centers as a condition of their probation.
Methods: Data collected routinely from the centers are processed, and provide basis for special analyses.
Duration: January 1963-January 1968.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

17-M-51 AN EVALUATION OF THE PROGRAM AT THE DIVISION FOR YOUTH HOME IN NEW YORK CITY

Purpose: To evaluate effectiveness of the Youth Rehabilitation Home in New York City, which is a supervised residence for 20 youths who will go to school or work in the community.
Subjects: Boys referred by courts to the New York City Home. Boys are randomly designated as experimentals (in the program) and controls (not in the program).
Methods: Data collected routinely from the Home are processed, and provide basis for special analyses.
Duration: February 1963-February 1968.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

17-M-52 AN EVALUATION OF THE PROGRAM AT THE DIVISION FOR YOUTH HOME IN BUFFALO, N. Y.

Purpose: To evaluate effectiveness of the Youth Opportunity Home in Buffalo, which is a supervised residence for 20 youths who will go to school or work in the community.
Subjects: Boys referred by duly authorized agencies with the consent of their parents to the Buffalo Home. Boys are randomly designated as experimentals (in the program) and controls (not in the program).
Methods: Data collected routinely from the Home are processed, and provide basis for special analyses.
Duration: February 1963-February 1968.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

17-M-53 A STUDY OF THE EFFECT OF GROUP SIZE ON APPROVED SCHOOL TREATMENT

Purpose: To discover whether treatment of approved school inmates may be better carried out in large units in which the role of peer groups would be important, or in smaller quasi-family units; to explore nature of group and interpersonal relations in such residential communities. Hypothesis: according to their degree of personal and social adjustment, boys may be more oriented toward adults or other boys in relationships they prefer to form.
Subjects: 50 boys, aged 13 to 16, in 15 intermediate schools; school staff.
Methods: Sociometric test as part of preliminary extensive survey, and a questionnaire for the staff. Intensive studies in a number of schools, chiefly through participant observation, are proposed.
Duration: October 1962-September 1965.
Investigator(s): Dr. Howard Jones, D. Perger, and A. Robertson, Department of Sociology, University of Leicester, Leicester, England. (Reported by NCCD.)
Cooperating group(s): Home Office.

17-M-54 JEFFERSON COUNTY JUVENILE COURT STUDY OF 60 DELINQUENT BOYS IN A GROUP RESIDENTIAL TREATMENT CENTER

Purpose: To determine the deterrent value of a specific method of treatment with a group of delinquent boys.
Subjects: 60 delinquent boys placed at Southfields Residential Group Treatment Center.
Methods: Longitudinal study designed to measure: (1) psycho-social findings prior to placement at the center; and (2) success and failure of juveniles completing the program and returning to the community.
Findings: Results through June 1963 indicate a positive method of treatment.
Duration: October 1962-continuing.
Investigator(s): Louis Scalo, ACSW, Senior Supervisor, Coy Dunlap, and David Owen, Jefferson County Juvenile Court, Room 800, Fiscal Court Bldg., Louisville, Ky. (Reported by NCCD.)
Cooperating group(s): Southfields Residential Group Treatment Center.

17-M-55 SUBJECTIVE IMPACT OF TRAINING SCHOOL EXPERIENCE ON MALE YOUTH AUTHORITY WARDS

Subjects: (1) 12 wards newly admitted to the Northern Reception Center-Clinic, selected as being likely to go to Preston School of Industry; and (2) 5 wards from Preston School of Industry, selected for qualities of intelligence and verbal ability.
Methods: Sequential interviews with first group tape recorded at two-week intervals at the Clinic and at six-week intervals at Preston. Collective interviews with second group at six-week intervals for several months, structured to provide a check on individual interviews held with first group and also to permit explorations into new areas.
Findings: Attitudes of training school wards appear to be shaped more by ward culture and ward social structure than by formal program and school staff. For a number of wards, training school experience probably results in increased recidivism. Others appear to respond positively to the experience. Results suggest need for alternatives to training school commitment for many wards as well as need for new programs to counteract present ward culture and social structure.
Duration: April 1959-continuing.
Investigator(s): William E. Cook, Ph.D., Joachim P. Seckel, M.A., and Keith S. Griffiths, Ph.D., Chief, Research Division, California Department of Youth Authority, 401 State Office Bldg. No. 1, Sacramento 14, Calif. (Reported by NCCD.)

17-M-56 COMPARISON OF LONG-TERM AND SHORT-TERM RESIDENTIAL TREATMENT FOR DISTURBED DELINQUENT GIRLS

Purpose: To study relative effectiveness of long-term (12 month) and short-term (3 month) treatment programs based on different treatment philosophies.
Subjects: Matched groups of approximately 150 each, selected from 400 disturbed, delinquent girls in long-term and short-term treatment programs. Subjects are primarily white, median ages 15.5 (short-term group) and 16.0 (long-term group), and represent all socio-economic levels, though heaviest concentration is from lower levels.
Methods: Personal and social history data, detention histories, offense characteristics, and clinical and psychometric data are collected to provide matching, baseline, and change information. Differences in performance during aftercare will be examined, including redetention after failure.
Findings: Preliminary findings indicate that attitudinal improvements are virtually the same in both institutional and aftercare phases.

Duration: October 1963-October 1965.
Investigator(s): Stuart Adams, Ph.D., Research Director, and Edgar W. Butler, M.A., Research Analyst, Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif.
Publication: Report will be released by Research Office, Los Angeles County Probation Department.

17-M-57 EVALUATION OF A TREATMENT PROGRAM FOR SERIOUSLY DISTURBED DELINQUENT GIRLS IN A PROBATION DEPARTMENT FACILITY

Purpose: To assess the total program of Las Palmas School for Girls.
Subjects: 100 girls, ages 15 to 18 who spent an average of 12 months at Las Palmas School.
Methods: Before-after measurements on a psychological inventory, intake and release clinical summaries, records of treatment experience, typological schemes, and post-release performance data. Evaluation will focus on psychometric and interpersonal behavioral changes by type of girl (Jesness, I-Level, and staff-designated types). Attention will also be centered on relative effectiveness of different program element configurations for specific types of girls and on extent to which intra-institutional changes carry over into the community after release.
Duration: August 1962-August 1965.
Investigator(s): Stuart Adams, Ph.D., Director of Research; Jean Heldoorn, M.S.W., M.R.E., and Alice Cassazza, Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif. (Reported by NCCD.)
Cooperating group(s): Los Angeles County Probation Department.

17-M-58 PROBATION: POSITION AND THE PROCESS

Purpose: To assess the relative effectiveness of different dispositions (positions) and supervision practices (treatment processes) in the probation setting, on the criterion of re-referral to probation. Theoretically, the research investigates effects of position assignment (being made a ward of the court and labelled a probationer) and treatment process (given supervision in the probation setting).
Subjects: Approximately 3,669 juveniles referred to eight southern California probation departments (excluding Los Angeles) for delinquent acts during a two-month period.
Methods: Procedures to record the actual frequencies and nature of contacts with youngsters will be used to assess supervision practices during the following year. Using eight administratively discrete probation departments provides the possibility of controlling statistically for characteristics of youngsters given different dispositions, so that the effects of these dispositions on the criterion can be legitimately assessed.
Duration: June 1963-July 1965.
Investigator(s): Alexander W. McEachern, M.A., Project Head, Youth Studies Center, and Visiting Associate Professor, School of Public Administration, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): County probation departments in Imperial, Kern, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties, California.
Publication: Planned in correctional, sociological and psychological journals.

17-M-59 STUDY OF EFFECTIVENESS OF 12-GIRL PROBATION CASELOADS

Purpose: To determine feasibility and economic practicability of a program to remove "hard-to-place" girls from detention in Juvenile Hall and to manage them in the community in small probation caseloads of 12 girls, as contrasted with usual caseload of 65 girls.
Subjects: Approximately 50 girls, median age 15.5, with extensive Juvenile Hall detention histories. Sample includes whites, Negroes, and Mexican-American girls considered unsuitable for foster home placement or continuation at home under normal probation supervision. Subjects either failed to meet criteria for admission to Probation Department's residential treatment centers, or the centers lacked space for them.
Methods: Female probation officers worked intensively with girls, their parents, siblings, and other significant figures. Evaluation was made through comparison of frequency, duration, and kind of detention to which any subjects were returned during a five month follow-up with similar data for a matching group of girls released from Juvenile Hall to conventional programs.
Findings: Experimental group returned to detention less frequently (35 percent vs. 43 percent), remained out of detention longer (mean of 108 days vs. 66 days), were detained for shorter periods (26 days vs. 52 days), and went to California Youth Authority less frequently (zero vs. 29 percent).
Duration: July 1963-October 1964.
Investigator(s): Stuart Adams, Ph.D., Research Director, and Calvin C. Hopkinson, M.S.W., Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif.
Publication: An Interim Evaluation of the Intensive Supervision Caseload, Research Report No. 12, January 1964, 24 pp. (L. A. County Probation Department).

17-M-60 EVALUATION OF GROUP COUNSELING WITH BOYS ON PROBATION

Purpose: To determine effectiveness of group counseling with mildly delinquent boys in an early phase of probation.
Subjects: 100 Negro and Caucasian boys, median age 16, referred for burglary, car theft, incorrigibility, glue sniffing, and petty theft. Most are known to the juvenile court, but none have yet been placed in the probation camps of Los Angeles County.
Methods: Each of six deputy probation officers selected about 16 suitable subjects from his caseload. Boys were randomized into control and experimental groups. Experimental groups met once weekly after school for a 90-minute group counseling session. Controls received usual individual counseling about once monthly. Psychometric measurements, police contact, and detention data were collected for criterion purposes.
Findings: Experimental groups performed slightly better than controls in avoiding police contacts, probation camp commitments, and California Youth Authority commitments. Superiority markedly better when the best five out of six groups were considered.
Duration: June 1963-June 1964.
Investigator(s): Stuart Adams, Ph.D., Research Director, Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif.

17-M-61 AN EXPERIMENT IN THE SOCIO-PSYCHOLOGICAL TREATMENT OF JUVENILES ON PROBATION

Purpose: To study juvenile delinquency in Denmark from the aspects of law, sociology, psychology, and psychiatry. To experiment in the socio-psychological treatment of juveniles on probation. To test hypothesis that proceeding from the traditional, to the mixed, to the experimental group, treatment

results will show greater re-socialization attributable to and varying with extent of socio-psychological contact experienced by offenders.
Subjects: 2100 juvenile offenders; juveniles on probation.
Methods: Project divided into three major phases: (1) a survey of juvenile delinquency, its forms and incidence, and a detailed investigation of 2100 offenders with special attention to types of criminal careers and to case histories; (2) a treatment experiment with juveniles on probation, consisting of a socio-psychological investigation and therapy by a team of social workers, psychologists, and psychiatrists; and (3) a follow-up study of the probationers in which results for offenders undergoing special treatment are compared with results for offenders undergoing traditional treatment.
Duration: October 1960-1967.
Investigator(s): Karl O. Christiansen, Assistant Director, Institute of Criminal Science, University of Copenhagen, Copenhagen, Denmark. (Reported by NCCD.)
Cooperating group(s): Ford Foundation.

17-M-62 WORK THERAPY PROGRAM

Purpose: To organize, conduct, and evaluate a school work therapy program for approximately 60 predelinquent or delinquent 14 and 15 year old boys.
Methods: Subjects will spend one-half day in school and one-half day in the Rehabilitation Institute of the Jewish Vocational Service where they will engage in subcontract work. They will receive credit for their studies and wages for their work. Evaluation will utilize a control population to determine effectiveness of work as therapy for delinquent boys.
Duration: September 1962-January 1964.
Investigator(s): Hercules M. Porter, Jewish Vocational Service of Milwaukee, 207 E. Buffalo St., Milwaukee, Wis.
Cooperating group(s): Theodore J. Kuemmerlein, Director, Department of Pupil Personnel, Milwaukee Public Schools.

17-M-63 ASSESSMENT OF A SPECIAL FORESTRY CAMP PROGRAM FOR DISTURBED DELINQUENT BOYS

Purpose: To assess Camp Kilpatrick, a special forestry camp, as a treatment facility for disturbed delinquent boys.
Subjects: First 125 boys entering Camp Kilpatrick, each boy serving as his own control.
Methods: Psychological inventories, clinical evaluations, staff ratings, treatment experience records, camp work and school performance data, and community performance records. Major foci of interest: kinds of attitudinal and behavioral changes; relation of change to boy classification in the Jesness and I-Level typologies; relative effectiveness of program elements; and persistence of camp-associated change into post-release period.
Duration: September 1962-September 1965.
Investigator(s): Stuart Adams, Ph.D., Director of Research, Glennen Walker, and James Miyano, Los Angeles County Probation Department, P. O. Box 4002, Terminal Annex, Los Angeles 54, Calif. (Reported by NCCD.)

17-M-64 AN EVALUATION OF THE YOUTH REHABILITATION CAMPS AT RENSSELAERVILLE, N. Y. AND CAROLINE CENTER, N. Y.

Purpose: To evaluate effectiveness of Youth Rehabilitation Camps which provide a short-term camp program away from the community, featuring counseling

and supervised work for adjudicated delinquents who appear to need more than probationary supervision, and who do not appear to need long-term incarceration.
Subjects: Boys referred by courts to Youth Rehabilitation Camps as a condition of their probation. Boys will be randomly designated as experimentals (in the program) and controls (not in the program).
Methods: Data collected routinely from camps are processed, and provide basis for special analyses.
Duration: January 1963-January 1968.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

17-M-65 AN EVALUATION OF THE PROGRAMS OF YOUTH OPPORTUNITY CAMPS AT GREAT VALLEY, N. Y. AND AT MASONVILLE, N. Y.

Purpose: To evaluate the effectiveness of Youth Opportunity Camps which provide a short-term camp program away from the community, featuring counseling and supervised work for youth referred by duly authorized agencies with consent of youths' parents.
Subjects: Boys referred by duly authorized agencies to Youth Opportunity Camps with consent of their parents. Boys will be randomly designated as experimentals (in the program) and controls (not in the program).
Methods: Data collected routinely from camps are processed, and provide basis for special analyses.
Duration: January 1963-January 1968.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)

EDUCATIONAL PROCESS

General

17-N-1 SOURCES OF EDUCATIONAL CLIMATES IN HIGH SCHOOLS

Purpose: To investigate sources of variations in educational and social climates of high schools in varying geographical and social contexts.
Subjects: Student bodies and staffs of 20 U. S. high schools in several geographical areas.
Methods: Survey research techniques using questionnaire, interview, and observational data in a panel design.
Findings: First findings available February 1965.
Duration: June 1963-June 1966.
Investigator(s): James S. Coleman, Ph.D., Professor of Social Relations, Johns Hopkins University, Baltimore 18, Md., and Edward L. McDill, Ph.D., Assistant Professor of Sociology, Vanderbilt University, Nashville 5, Tenn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Cooperative Research Branch, Office of Education.

17-N-2 INFLUENCE OF "RESSENTIMENT" ON STUDENT EXPERIENCE IN HIGH SCHOOL

Purpose: To assess the effect of social climates in secondary schools on student values and creativity.
Subjects: Pretest assessment of social climate: 100 students in grades 10 to 12 in each of seven public and two private high schools. Intensive interview: 25 of each group of 100.
Methods: Pretest assessment employs G. G. Stern High School Characteristics Index supplemented by additional items in same format designed to assess "ressentiment".
Duration: August 1962-June 1965.
Investigator(s): Edgar Z. Friedenberg, Ph.D., Associate Professor of Education, Carl Nordstrom, Ph.D., Assistant Professor of Economics, and Hilary Gold, Ph.D., Assistant Professor of Education, Brooklyn College, City University of New York, Brooklyn 10, N. Y.
Cooperating group(s): College Entrance Examination Board; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report to Cooperative Research Division, Office of Education by June 30, 1965. Material also to be included in popular form in a book now being written under contract with Random House. Serendipitous findings reported in Commentary at various times in past year.

17-N-3 EDUCATIONAL ASPIRATIONS OF FARM BOYS AND GIRLS

Purpose: To identify factors, especially school factors, associated with various levels of educational aspiration.
Subjects: Juniors and seniors in 35 rural high schools.
Methods: Questionnaires and interview.
Duration: August 1963-June 1966.
Investigator(s): Walter L. Slocum, Ph.D., Professor and Chairman, Department of Rural Sociology, Washington State University, Pullman, Wash.
Cooperating group(s): Department of Education, Washington State University; Office of Education, U. S. Department of Health, Education, and Welfare.

17-N-4 FOLLOW-UP STUDIES OF DETERMINANTS OF EDUCATIONAL-VOCATIONAL CHOICES

Purpose: To develop progressively more complex answers to the question of how educational-vocational choices of public school and university students are determined. To lay ground work for an adequate theory of educational and career development, and for later experimental investigations on diverse populations.
Subjects: Drawn from 7627 public school pupils in grade 9 during spring 1960, and 1596 students who were University of Hawaii freshmen in 1960, representing over 80 percent of enrollment figures in Hawaii.
Methods: Descriptive, comprehensive, longitudinal, and comparative studies of student characteristics. Assignment to control and experimental groups based on educational-occupational status at follow-up compared with educational status three years earlier. Dependent measures: reported determinants, measured ability, educational-occupational plans, and selected social-personal characteristics. Studies of characteristics of determinants will be analytical, correlational, longitudinal, representative, and comparative. Inventory items and scales will be treated as antecedent categories against criteria of consistency upon replication, and of educational-occupational status on follow-up. Data to be collected through two parallel inventories: What I Like To Do, and Reasons for Going to College.
Duration: June 1963-September 1964.
Investigator(s): Arthur A. Dole, Ph.D., Associate Professor of Psychology, University of Hawaii, Honolulu, Hawaii 96822.
Cooperating group(s): Social Science Research Institute, University of Hawaii; Hawaii State Department of Education; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to appropriate journals and to Office of Education.

Achievement, aptitude, and school adjustment

17-O-1 PRESCHOOL PREDICTION OF SCHOOL ADJUSTMENT

Purpose: Long range goal is to determine whether immaturity for school (academic, social, emotional) can be detected in order to obviate some otherwise highly probable "failures". Immediate purpose is to obtain correlations and probability tables of (1) preschool tests; and (2) achievement test results and teacher ratings.
Subjects: Children who will enter first grade in the fall, and who will have had no previous kindergarten experience.
Methods: Subjects are tested during spring preceding their entrance in first grade. Later school performance is reflected in teacher ratings in reading, math, social and emotional adjustments, and by achievement tests.
Findings: Lowest correlations of predictor and criterion variables found to be .65 in first year group.
Duration: 1960-1964.
Investigator(s): Willard H. Nelson, Ph.D., Associate Professor of Psychology and Education, Florida State University, Tallahassee, Fla.
Cooperating group(s): Gadsden County Schools.
Publication: Planned in education and/or psychology journal.

17-O-2 PREDICTION OF SCHOOL ACHIEVEMENT AND ADJUSTMENT

Purpose: To discover how well a standard battery of psychological tests will

predict school achievement in a longitudinal sense; to discover the most efficient predictors and the main problems in prediction; to collect test norms in a longitudinal developmental sense.
Subjects: First grade school children beginning their first week in two small suburban elementary schools. After three years, number now is 58.
Methods: Standard battery of psychological tests, including Binet, Bender-Gestalt, Draw-a-Person, and Rorschach has been given during first week of school year to the same children, beginning in fall of 1960. School achievement in terms of grades and ranks, and school adjustment in terms of teachers' comments have been collected every June. Testing will continue throughout school career of these children with some modification, particularly in terms of intelligence test used. School progress will also be followed. Data will be analyzed for trends, patterns and relationships at regular intervals.
Findings: Preliminary findings suggest that total battery, using criterion of two-thirds of quantitatively scored tests (Binet, Bender-Gestalt and Draw-a-Person) or three-fourths of tests on a sign basis at appropriate level of maturity (i.e., 6-0 at beginning first grade) gives a relatively adequate prediction basis. Statistics have been computed with reference to first testing (1960) only, using first grade patterns to predict first and second grade academic achievement. Certain individuals show patterns which elude prediction on any basis.
Duration: September 1960-indefinite.
Investigator(s): Inger A. Olsen, Ph.D., H. Elizabeth Jensen, M.A., and Mary Robitaille, B.A., Psychologists, Mental Hygiene Division, Metropolitan Health Services, 456 W. Broadway, Vancouver 5, B. C.
Cooperating group(s): School Board, Municipality of Burnaby.
Publication: One introductory article submitted to Pulse (Vancouver School Board Special Counsellors Journal). Several articles planned for publication in psychological and child development journals.

17-O-3 SOCIAL AND CULTURAL FACTORS RELATED TO SCHOOL ACHIEVEMENT

Purpose: (1) To provide a thorough description and analysis of the way of life of a school-age population in one high school district in the inner core of a middle-sized northern city; (2) to provide benchmarks, particularly with reference to school achievement, against which to measure the effect of demonstration programs to begin at a later date; (3) to describe the needs of the school-age population, as they see it, with reference to experience and opportunities; (4) to describe the desires, goals and aspirations of the school-age population to better understand their system of motivation.
Subjects: 100 boys and 100 girls from grades 4, 6, 8, 10, and 12. The 10th and 12th graders will be drawn from one high school; the 8th graders from the two junior high schools; the 4th and 6th graders from three of the elementary schools in the district.
Methods: (1) Intensive interviews with students; (2) administration of a self-administered questionnaire to all students; (3) participant observer will live in the area to observe out-of-school life, particularly of older students.
Duration: September 1963-September 1965.
Investigator(s): Harry C. Bredemeier, Ph.D., and Bernard Goldstein, Ph.D., Urban Studies Center, Rutgers, The State University, New Brunswick, N. J.
Cooperating group(s): Newark City Board of Education; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Articles, monographs, etc., are planned.

17-O-4 A COMPARATIVE STUDY OF ACADEMIC ACHIEVEMENTS OF ELEMENTARY AGE STUDENTS IN THE UNITED STATES AND THE BRITISH ISLES

Purpose: To determine whether academic achievement of elementary age pupils

in the United States is significantly different than that of their counterparts in the British Isles; to determine whether achievement of pupils in United States differs significantly when examining pupils of similar ability levels; and to determine specific periods within and across the elementary grades where differences do occur.
Subjects: Random samples of approximately 4400 pupils of varying ability levels have been selected from American and English communities and schools within these communities having like characteristics. These students have been selected from both private and public schools in the United States and British Isles.
Methods: Standardized achievement and I.Q. tests, agreed upon by American and British participants are being administered, the former in September 1963, February and May 1964; the latter in September 1963. Reliability and validity of instruments used will be obtained. Analysis of variance, utilizing electronic computers, will be made to statistically accept or reject the stated hypotheses. Results of the collection, tabulation and analyses of the data will be summarized and disseminated.
Duration: June 1963-September 1964.
Investigator(s): Robert L. Gibson, Ed.D., Assistant Dean, College of Education, University of Toledo, Toledo, Ohio.
Cooperating group(s): Ministry of Education for Northern Ireland; National Foundation for Education Research in Scotland; National Foundation for Educational Research in England and Wales; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Summary of study will be published by University of Toledo following completion of analysis.

17-0-5 SCHOOL ACHIEVEMENT AS RELATED TO DEVELOPMENTAL SPEECH INACCURACY

Purpose: To consider: (1) academic achievement among children with developmental speech problems as compared to children without speech problems; (2) effect of speech therapy with children who evidence developmental speech problems on speech difficulty and school achievement.
Subjects: Entire first grade population of two local suburban schools.
Methods: Battery of new speech and modality tests developed at the University of Chicago, readiness tests, and achievement tests administered at three intervals during study.
Duration: July 1963-June 1967.
Investigator(s): Joseph M. Wepman, Ph.D., Professor, Departments of Surgery and Psychology, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Relevant research journals.

17-0-6 A STUDY OF FIRST GRADE FAILURE: DIAGNOSIS, TREATMENT AND PREVENTION

Purpose: To determine the causes and psycho-educational treatment and prevention of failure in the first grade.
Subjects: 20 first grade failures for two consecutive years.
Methods: Interdisciplinary approach: intensive social, psychological, medical and educational diagnosis; psycho-educational treatment based on diagnostic findings; development of psycho-educational techniques and materials for the prevention of failure.
Duration: September 1962-June 1964.
Investigator(s): Katharine C. Cotter, Ph.D., Associate Professor of Education, Boston College, Chestnut Hill 67, Mass.
Cooperating group(s): Nazareth Child Guidance Center.
Publication: Probably in a professional education journal.

17-O-7 SURVEY OF VOCATIONAL APTITUDES OF A SELECTED SAMPLE OF DROPOUTS FROM A BALTIMORE JUNIOR HIGH SCHOOL

Purpose: To determine proportion of school dropouts having sufficient aptitude to acquire job training, or the minimum skills required to contribute acceptably in a competitive labor market.
Subjects: 45 cases drawn from eighth and ninth grade students who dropped out of a Baltimore junior high school during a two-year period.
Methods: Series of aptitude tests administered to sampled cases before their dropout from school. Data analyzed and described statistically, and compared with the "normal" nondropout school population.
Findings: Tentative results indicate that one-half of junior high school dropout population has sufficient aptitudes to make a usable and meaningful contribution to the labor market.
Duration: Spring 1962-fall 1964.
Investigator(s): Neil R. Lovelace, Ed.D., Specialist in Testing, Bureau of Educational Testing, Baltimore Public Schools, Baltimore 18, Md. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1963.)

17-O-8 INTERVIEW FOLLOW-UP OF MINNEAPOLIS SCHOOL DROPOUTS

Purpose: To compare personal-social data as obtained through interviews with data obtained through school records in relation to school dropout and delinquency.
Subjects: Samples of recent graduates, school dropouts, and their parents.
Methods: Structured interview.
Duration: March 1963-January 1965.
Investigator(s): Robert D. Wirt, Ph.D., Professor of Psychology, University of Minnesota, Minneapolis 14, Minn.
Cooperating group(s): Minneapolis Group Development Project; Minneapolis Public Schools; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-O-9 DELINQUENCY, DROPOUT, AND THE SOCIAL MILIEU OF THE SCHOOL

Purpose: To locate the sources of strain and tension within the school milieu, and to relate these specific kinds of tension-producing situations to delinquency and school dropout. On the basis of theoretical orientation, particular attention will be focused upon: (1) delinquency and dropout; (2) dropouts and employment; (3) occupational aspirations and school achievement; and (4) status deprivation and delinquency.
Subjects: Random sample of all San Diego ninth grade students (N=3,000) in fall 1963; parent of each student.
Methods: Annual questionnaire for four years to subjects; interview of parents at beginning and end of study. Delinquency data will be gathered and dropouts will be followed regardless of mobility.
Duration: February 1963-February 1968.
Investigator(s): Delbert S. Elliott, Ph.D., Assistant Professor, and Aubrey Wendling, Ph.D., Professor and Chairman, Department of Sociology and Anthropology and Director, Social Research Center, San Diego State College, San Diego 15, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Annual progress reports will be issued. Articles in professional journals, papers, and a book are planned.

17-O-10 FAMILY FACTORS AND SCHOOL DROPOUT: 1920-1960

Purpose: To investigate changes occurring over the last 40 years in influence of social background and community climate on educational attainment of adolescent males. Association between attainment and factors such as education and occupation of family head and number of siblings will be examined for whites and nonwhites in 1960, and at eight earlier dates back to 1916-20. Relationship between occupational positions obtained by young men upon entry into the work force and their education also will be explored at nine points in time. Shifts in spatial aspect of dropout phenomenon between 1920 and 1960 will be explored in relation to changes in community structure, such as economic opportunities for youths and proportion of two-generation urbanites among adolescents.
Methods: Studies rely upon statistics collected by Bureau of the Census in decennial Censuses of Population and the March 1962 Current Population Survey. Special tabulations are being prepared by the Census Bureau for a sample of about 22,000 native males aged 20 to 61 in 1962, relating their educational attainment to other characteristics. Tabulations of a sample of about 5,700 native males aged 14 to 17 in 1960 are being prepared from the one-in-a-thousand sample tape of the 1960 Census of Population. Analyses will rely primarily on regression techniques. Statistics on spatial aspects of the dropout phenomenon are drawn from published data of the Bureau of the Census.
Duration: July 1963-September 1965.
Investigator(s): Beverly Duncan, Ph.D., Research Associate, Population Studies Center, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Results will probably be presented in monographic form and/or in journal articles.

17-O-11 SCHOOL DROPOUT PROBLEM IN BUFFALO

Purpose: To ascertain number of school dropouts, their characteristics, concentration of residence by census tracts, and economic characteristics of areas where dropouts are concentrated, compared with the characteristics of areas where dropouts are scarce. To determine extent to which school dropouts utilize state facilities for placement.
Methods: Data collected from school records and New York State Employment Service records were processed to provide special analyses.
Duration: October 1962-April 1964.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Buffalo Public School System; Erie County Welfare Department; New York State Employment Service.

Specific skills

17-P-1 RELATIONSHIPS BETWEEN SELECTED LANGUAGE VARIABLES AND COMPREHENSION ABILITY AND DIFFICULTY

Purpose: To find linguistic variables that will improve ability to predict comprehension difficulties of children in written and verbal materials.
Subjects: 875 children, nearly equally distributed in grades 4 to 8.

Methods: Twenty passages of approximately 250 words in length were selected from each of five subject matter areas. Within each subject matter area, passages were about evenly distributed in Dale-Chall formula predicted readability from grades four through eight (uncorrected). Five cloze test forms were made over each passage by the "every-fifth-word-deletion" technique. This allowed every word in every passage to appear as a test item exactly one time. Each form was administered to one of five groups matched for mean and distribution of reading ability. Item difficulties were then computed for each word. This was taken as the criterion of comprehension difficulty of that word. These values and the averages of these values computed across linguistic units of various sizes were then correlated with various linguistic variables.
Duration: June 1963-August 1964.
Investigator(s): John R. Bormuth, Ed.D., Assistant Professor of Education, University of California, Los Angeles 24, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: At least three journal articles and a monograph will be published.

17-P-2 MULTIPLE COUNSELING WITH FOURTH GRADE BOYS AND GIRLS HANDICAPPED IN LANGUAGE ARTS COMMUNICATION

Purpose: A pilot project to investigate the value of multiple counseling with fourth grade boys and girls who, because of emotional handicaps, are unable to function verbally at a level commensurate with their measured mental ability.
Subjects: Two classes of about 10 students each, ages 8 to 10, of both sexes, and who were "underachieving" in school and who were adjudged to be underachieving because of affective flatness and limited ability to communicate effectively with peers, parents and teachers.
Methods: Each group met in a schoolroom for an hour daily during the summer for six weeks with a psychologist who had previous teaching experience, and was a specialist in reading and language arts. The program was unstructured except as students themselves desired it. Students were given extensive ego support therapy and were helped to function better in the communication process. Monthly meetings were held over a period of a year with the parents. These were designed to help them come to a more comprehensive understanding of their children and their abilities.
Findings: Fourth grade boys and girls can respond to, and be effectively helped by, a multiple counseling program designed to strengthen self-concept and improve basic communication. It is most effective when parents can become involved in a year-long program designed to help them see changes which are taking place in their children.
Duration: June 1961-June 1962.
Investigator(s): Dorothea Brayer, M.S., School Psychologist, and William L. Smith, Ph.D., Coordinator, Pupil Personnel Services, Webster Central School, Webster, N. Y.
Publication: None anticipated.

17-P-3 LONGITUDINAL STUDY OF LANGUAGE SKILLS IN CHILDREN WITH VARYING SPEECH SOUND ARTICULATION

Purpose: To identify factors related to articulation, spelling, and reading at third or fourth grade level. To study relationships between a variety of language skills over a period of time. To describe development of consonant articulation. To carry on ancillary studies with samples selected on

different language variables. This is an extension of an earlier study (Bulletin 12, Research Relating to Children) which followed children through second grade.
Subjects: 490 children in three groups: (1) children whose articulation differs with and without an aural model; (2) children with single phoneme misarticulations -/l/, /r/, /s/; and (3) children with total articulation scores clustering about the 7th, 15th, 30th, 50th, and 98th percentiles.
Methods: Testing will relate to previously gathered data and will include measures of articulation, grammar, syntax, word association, reading, spelling, sound-letter association, and written and oral language. Stimulus materials for ancillary studies being developed. Analyses will include identification of factors predicting articulation, reading and spelling skills, determination of interrelations among language variables, and description of their development.
Duration: January 1960-September 1966.
Investigator(s): Mildred C. Templin, Ph.D., Professor, Institute of Child Development, University of Minnesota, Minneapolis 14, Minn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

17-P-4 SUBSTRATA-FACTOR CHANGES ACCOMPANYING DEVELOPMENT OF GENERAL READING ABILITY AT THE ELEMENTARY SCHOOL LEVEL

Purpose: To test two hypotheses derived from the substrata-factor theory of reading: (1) development of general reading ability is accompanied by systematic changes in magnitude of substrata elements and/or reorganization in working-systems mobilized for power and speed of reading; and (2) individuals in intermediate grades are at a transitional stage of development in kinesthetic-auditory-visual gradient shift sequence. During upper elementary grades, psychoeducational factors interact with their maturing physiological substrata to result in a shift in dominance in individual's working system from an auditory to a visual modality.
Subjects: Approximately 200 children drawn from three successive upper elementary grades.
Methods: Administration of an empirically-determined battery of 36 variables. Resulting data will be analyzed by means of correlation, substrata analysis, and analysis by correspondence for each grade level. Comparison of analyses across the grades will be made in order to infer whether hypotheses are tenable.
Duration: February 1963-January 1965.
Investigator(s): Harry Singer, Ph.D., Assistant Professor of Education, University of California, Riverside, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Article to appear in Review of Educational Research in April 1964; interim report to be published in Proceedings of the International Reading Association in 1964; final report to Office of Education in January 1965.

17-P-5 THE EXPERIMENTAL DEVELOPMENT OF THE SET OF VARIABILITY IN RATE OF READING.

Purpose: To attempt to develop experimentally in intermediate grade children the set of flexibility in rate of reading as a function of one's purpose for reading and nature of material read; and to measure the effects of a flexible rate of reading set upon comprehension, speed and stress in reading performance.
Subjects: 128 elementary school children in grades 4 to 6 in public schools.

Methods: Survey of extent to which flexibility in rate of reading exists. Train two selected groups of readers, one with high speed sets and one with low speed sets, to vary rate as a function of reading purpose and the nature of material read.
Duration: September 1962-August 1964.
Investigator(s): Theodore L. Harris, Ph.D., Professor of Educational Psychology, Virgil E. Herrick, Ph.D. (deceased), James B. Macdonald, Ph.D., Professor of Education, and G. Lawrence Rarick, Ph.D., Professor of Physical Education, University of Wisconsin, Madison 6, Wis.
Publication: Material to be submitted to American Educational Research Association and American Psychological Association.

Special education

17-Q-1 THE EFFECT OF PROGRAMMED INSTRUCTION IN SPECIAL SKILLS DURING THE PRESCHOOL PERIOD ON LATER ABILITY PATTERNS AND ACADEMIC ACHIEVEMENT

Purpose: To enrich the environment of impoverished children to determine if this will increase their educability.
Subjects: Preschool children, both rural and urban.
Methods: Programmed instructional procedures.
Duration: July 1962-October 1965.
Investigator(s): Eugene R. Long, Jr., Ph.D., Professor of Psychology, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Journal of the Experimental Analysis of Behavior 6:459-472, 1963.

17-Q-2 EDUCATIONAL ENRICHMENT FOR A SMALL GROUP OF ABLE THOUGH CULTURALLY DEPRIVED JUNIOR HIGH SCHOOL AGE BOYS

Purpose: To test the effectiveness of a community sponsored educational club to help culturally deprived students overcome their educational handicap.
Subjects: 32 junior high school students.
Methods: Comparison of experimental and control groups for change along several attitude and ability dimensions, after a year's participation in the program.
Duration: September 1961-continuing.
Investigator(s): Eugene Stivers, Ph.D., Assistant Professor of Education, Los Angeles State College, Los Angeles 32, Calif.
Cooperating group(s): Junior League of Los Angeles.
Publication: Two reports: spring 1963 and fall 1963.

17-Q-3 PROGRAM FOR COGNITIVE AND MOTIVATIONAL DEVELOPMENT OF THE SCHOLASTICALLY RETARDED CHILD

Purpose: To enrich cognitive abilities of children of normal intelligence from lower socio-economic backgrounds, having less scholastic success and greater incidence of reading retardation than children from more fortunate circumstances.

Methods: Enrichment of following abilities during kindergarten: perceptual, attentional, conceptual, informational and verbal, to demonstrate that a correct enrichment program can reverse the disability of these children. Evaluation made of enrichment procedure through comparison with control group, measurement of abilities concerned immediately following program and again two years later.
Investigator(s): Martin Deutsch, Ph.D., Associate Professor, Martin Whiteman, Ph.D., Associate Research Professor, Shirley Feldman, Ph.D., Instructor and Coordinator of Remedial Services, and Suzanne Keller, Assistant Research Professor, Institute for Developmental Studies, Department of Psychiatry, New York Medical College, Flower and Fifth Avenue Hospitals, New York 29, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-Q-4 COUNSELING AND GUIDANCE FOR UNDERACHIEVING FOURTH GRADE STUDENTS

Purpose: To employ some of the established secondary school guidance techniques at the elementary level to determine their effectiveness in altering underachievement and personal behavior; to determine the concomitants of underachievement at the elementary level.
Subjects: 100 underachieving fourth grade students. "Underachiever" is here defined as a student whose earned GPA is approximately one standard error of estimate below his predicted GPA.
Methods: In first semester of school year 1963-64 a Wechsler Intelligence Scale for Children (WISC) was administered to fourth grade children in 10 elementary schools. The CTP and SSSR were also administered. Underachievers in each classroom were identified and randomly assigned by conditions: (1) individual counseling; (2) group counseling; (3) reading instruction; (4) attention, or "Hawthorne effect;" and (5) control.
Duration: September 1963-September 1964.
Investigator(s): Paul F. Munger, Ph.D., Professor of Education, Indiana University, Bloomington, Ind., and Ronald C. Winkler, Ph.D., Instructor, Counseling and Guidance, University of North Dakota, Grand Forks, N. Dak.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Results will be published in various counseling and guidance journals.

17-Q-5 EFFECTS OF MENTAL HEALTH SERVICES UPON A CLASS OF NONACHIEVING CHILDREN

Purpose: To postulate the differential effects of alternative mental health services for nonachieving children placed in a special class.
Subjects: Seven nonachieving children and their parents; two control groups of 11 nonachieving children in conventional classrooms.
Methods: Special class conducted with experimental group for two and one half years. Meetings were held with parents, and extensive intelligence and achievement tests were administered to sample. Interviews were held with special class children and their alternates to compare attitudes of parents and their children regarding academic and social achievements.
Investigator(s): James G. Kelly, Ph.D., Chief, Community Projects Section, J. R. Newbrough, Ph.D., Director, Reading Project, and Fortune V. Mannino, Ph.D., Director, Consultation Service Unit, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd. East, Adelphi, Md.

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17-Q-6 INFLUENCE OF VISION TRAINING UPON SUBSEQUENT READING ACHIEVEMENT OF FOURTH GRADE CHILDREN

Purpose: To answer questions regarding effectiveness of vision training, procedures, and stability of changes, with implications regarding epidemiology of reading disability.
Subjects: Random sample of fourth grade disabled readers, divided into two groups of 40 or more.
Methods: Subjects are examined by a psychologist and an optometrist (expert in children's vision) to confirm a one and one-half year difference between MA and reading age, and that vision training is indicated. Experimental group receives vision training; control group does not. Both groups receive remedial reading instruction. Follow-up study one year later will measure stability of any discovered changes.
Duration: January 1963-January 1967.
Investigator(s): Charles B. Huelsman, Jr., Ph.D., Professor of Psychology, Ohio State University, Columbus 12, Ohio, and Lois B. Bing, O.D., Ontometrist, Cleveland, Ohio.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

17-Q-7 EXPERIMENTAL STUDY OF REMEDIAL READING INSTRUCTION FOR YOUNG DELINQUENTS

Purpose: To assess amount and quality of reading improvement exhibited by wards completing a program of intensive remedial reading instruction at Fricot Ranch School, and to determine how this is related to their attitudes and adjustment.
Subjects: Eight classes of about 15 students each, varying from nonreaders to severely retarded and nonretarded readers.
Methods: Subjects allocated to four sets of classes; within each set, students equated by I.Q. and reading achievement scores. One class in each set receives remedial reading; others receive regular reading instruction for first three months of experimental period. Alternate classes from each set given remedial reading the following three months. Two control groups not exposed to remedial training during the study.
Duration: 1962-1965.
Investigator(s): William E. Cook, and Joachim P. Seckel, M.A.; Keith S. Griffiths, Ph.D., California Department of the Youth Authority, 401 State Office Bldg. No. 1, Scramento 14, Calif. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Summer 1963.)

17-Q-8 EFFICACY OF PREVOCATIONAL CURRICULUM AND SERVICES DESIGNED TO REHABILITATE SLOW LEARNERS WHO ARE SCHOOL DROPOUT, DELINQUENCY, AND UNEMPLOYMENT PRONE

Subjects: 124 slow learners (62 experimental, 62 control) in grades 7 through 12 screened from 402 potential subjects referred by teachers, counselors, and previous records of psychological testing.
Methods: Subjects will be divided into four treatment groups: (1) prevocational curriculum and prevocational services; (2) traditional curriculum and prevocational services; (3) prevocational curriculum but no prevocational services; and (4) traditional curriculum and no prevocational services. It is hypothesized that group (1) will be superior to groups (2), (3), and (4), and that this superiority will be most striking when group (1) is compared to group (4).
Duration: July 1962-1965.
Investigator(s): Merle B. Karnes, Ed.D., Director of Special Services, Champaign Community Unit 4 Schools, 705 S. New St., Champaign, Ill.

Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Progress report published by Champaign Community Schools, March 1963.

17-Q-9 SCHOOL CENTERED REHABILITATION PROGRAM FOR PREGNANT SCHOOL-AGE GIRLS IN WASHINGTON, D. C.

Purpose: To determine the validity of grouping pregnant girls in a school setting with a rehabilitation program provided by a multi-disciplinary team; to show the value of cooperative inter-agency action in meeting needs of expectant mothers of school age.
Subjects: 125 pregnant school-age girls.
Methods: Regular curriculum is offered plus additional content in personal and family living, social customs, mores, and basic needs of individuals. Supervision of girls' health needs including prenatal, delivery, and postnatal care. Individual counseling with each girl and her parents. Case records kept for each girl including interpretation of data and recommendations for implementing the program.
Duration: June 1963-May 1966.
Investigator(s): Elizabeth M. Goodman, Principal, Sharpe Health School, D. C. Public Schools, 13th and K St., N. W., Washington 5, D. C.
Cooperating group(s): D. C. Departments of Public Health and Public Welfare; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Q-10 A COOPERATIVE JOB TRAINING PROGRAM FOR RETARDED YOUTH

Purpose: (1) To develop a practical program of vocational instruction in the public high school for mentally retarded youth; (2) to test effectiveness of cooperative work experience in preparing for and establishing mentally retarded youth in self-sustaining employment; and (3) to develop criteria for predicting success of mentally retarded youth in cooperative work-experience programs and subsequent employment.
Subjects: Mentally retarded youth, aged 16 and over, enrolled in high schools of Evansville, Indiana. Random sample of 74 pupils currently involved in experimental and control treatment.
Methods: Experimental group receives cooperative work-experience treatment; control group takes two periods per day of "practical arts" courses. Other educational experience similar. Follow-up studies after separation from school to be conducted.
Duration: April 1963-March 1966.
Investigator(s): Max Eddy, Ed.D., Associate Professor of Industrial Education, Purdue University, Lafayette, Ind.
Cooperating group(s): Evansville School Corporation; Purdue Research Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-Q-11 DEVELOPMENT OF A COOPERATIVE VOCATIONAL PATTERN FOR IN-SCHOOL MENTALLY RETARDED YOUTH

Purpose: To establish improved articulation between school and work experiences of mentally retarded adolescents. To demonstrate a pattern of professional relationships among a State rehabilitation agency, a school system, and a community workshop designed to bridge the school-work gap.

Subjects: Students in their final year of educational experience in special classes of the Newark School System.

Methods: Students attend a special program twice a week at the Occupational Center, Essex County. Orientation and group experiences are provided first semester. Initial evaluation experiences begin near end of semester and continue through second semester; remunerative work activity in the Occupational Center follows if feasible. Students continue their service at the Occupational Center and the New Jersey Rehabilitation Commission following graduation. Effectiveness of program in enhancing the vocational preparation of the experimental subjects evaluated.

Duration: 1963-1966.

Investigator(s): Arthur Bierman, Occupational Center of Essex County, Inc., 29 S. Sixth St., Newark 7, N. J.

Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

17-Q-12 AN INVESTIGATION OF THE TERMINAL PUBLIC SCHOOL SPECIAL CLASS CURRICULUM AND ENVIRONMENT AND VOCATIONAL REHABILITATION OF MENTALLY RETARDED YOUNG ADULTS

Purpose: Primarily, to establish 11 demonstration projects for mentally retarded young adults in selected rehabilitation facilities.

Subjects: Educable mentally retarded young adults, chronological ages 16 to 21, having I.Q.'s from 50 to 75.

Methods: Projects located in 11 cities in Alabama, being housed in physical facilities within a rehabilitation facility, affording a workable approach to evaluation and placement within the rehabilitation setting.

Duration: September 1961-August 1964.

Investigator(s): Jasper Harvey, Ph.D., Professor and Chairman, Department of Special Education, University of Alabama, University, Ala.

Cooperating group(s): 11 rehabilitation facility boards; 19 local county and city boards of education; Division of Rehabilitation and Crippled Children, and Program for Exceptional Children, Alabama State Department of Education.

Publication: Second year report available from principal investigator.

17-Q-13 A COORDINATED REHABILITATION PROGRAM FOR HANDICAPPED YOUTH--STUDY AND DEMONSTRATION

Purpose: To establish a four-year coordinated program for rehabilitation counseling and related services for handicapped high school students in the School District of Kansas City, Mo.

Subjects: Comparable experimental and control groups of 75 ninth grade students with disabilities other than mental retardation.

Methods: Experimental group receives four-year coordinated program of evaluation, educational counseling, personal counseling, vocational counseling, and trial work experience. Four-year follow-up of experimental and control groups and comparison by objective measures of vocational adjustment.

Duration: May 1963-August 1968.

Investigator(s): Bertram Brant, M.A., Executive Director, Jewish Vocational Service, 1606 Main St., and Clyde J. Baer, Ed.D., Director of Research, School District of Kansas City, Kansas City, Mo.

Cooperating group(s): Kansas City Association of Trusts and Foundations; School District of Kansas City; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

17-Q-14 DEMONSTRATION OF THE BENEFITS OF ORIENTATION AND MOBILITY TRAINING BY COMPETENT INSTRUCTORS OF BLIND STUDENTS IN JUNIOR AND SENIOR HIGH SCHOOLS

Purpose: To utilize adult-validated orientation and mobility skills for blind junior and senior high school students enrolled on the Catholic Charities programs for the blind.
Subjects: 13 junior and senior high school students, ages 11 to 16, who have received training in orientation and mobility techniques.
Methods: The teaching is done by a professional, full time, sighted instructor on an individual tutoring basis during or after the regular school day, using adult-validated skills with minor revisions. Hand and arm protection and the "Long Cane" technique are two of the mobility methods taught.
Findings: Findings can only be termed, "indications" at this point. Although reasonable success has been achieved in the teaching of orientation and mobility skills with junior and senior high school students, it is felt that there is a need for gaining independent skills, skills in the area of physical activity, and a greater awareness of the environment at an earlier age. Also, orientation and mobility should be a fundamental part of the blind child's education and should begin at the primary level.
Duration: August 1963-June 1967.
Investigator(s): Patricia Bledsoe, Ph.D., Director, Guidance Clinic, Robert Gockman, B.S., Instructor, Orientation and Mobility, and Marian C. Quinn, M.A., Director, Department of Vision and Hearing, Catholic Charities, 126 N. Desplaines St., Chicago 6, Ill.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Written summary at the completion of demonstration.

17-Q-15 EMPLOYMENT TRAINING IN ON-THE-JOB WORK SITUATIONS FOR HANDICAPPED ADOLESCENTS

Purpose: To demonstrate and evaluate a four year vocationally oriented educational program for handicapped children, beginning in grade nine.
Subjects: 150 experimental and 150 matching control pupils, aged 14, representing different categories of physical, mental, and emotional handicaps.
Methods: Subjects receive both in-school and on-the-job instruction, with program divided into four phases: (1) employee-oriented; (2) industry-oriented; (3) skills-oriented; and (4) career-oriented. On-the-job instruction is provided by employees of the industries cooperating in this project, and is complemented by a coordinated school program. Instruments and procedures will be developed to assess progress and outcomes. Data pertaining to pupils' attitudes, understanding of vocations, and reactions of employees and parents will be gathered for evaluation.
Duration: 1962-1967.
Investigator(s): Samuel M. Goodman, Ph.D., Assistant Director of Research, James R. Ward, Supervisor of Field Studies, and Paul H. Humphries, Research Psychologist, Montgomery County Public Schools, 850 N. Washington St., Rockville, Md.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

17-Q-16 AN EVALUATION OF THE BEDFORD YMCA TRADE SCHOOL PROGRAM

Purpose: To evaluate effectiveness of a special program for school dropouts developed by the Bedford YMCA in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from Bedford YMCA Trade School are pro-

cessed, and provide basis for special analyses.
Duration: September 1962-September 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Bedford YMCA; New York State Employment Service.

17-Q-17 AN EVALUATION OF THE EAST HARLEM YOUTH EMPLOYMENT SERVICE

Purpose: To evaluate effectiveness of a special program for school dropouts developed by the East Harlem Youth Employment Service in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from East Harlem Youth Employment Service are processed, and provide basis for special analyses.
Duration: August 1962-August 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): East Harlem Youth Employment Service; New York State Employment Service.

17-Q-18 AN EVALUATION OF THE BUFFALO YOUTH AND WORK PROGRAM

Purpose: To evaluate effectiveness of a special program for school dropouts, developed by the Buffalo Youth Board in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from Buffalo Youth and Work Program are processed, and provide basis for special analyses.
Duration: September 1962-September 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Buffalo Youth Board; New York State Employment Service.

17-Q-19 AN EVALUATION OF THE POLICE ATHLETIC LEAGUE YOUTH AND WORK PROGRAM

Purpose: To evaluate effectiveness of a special Police Athletic League program for school dropouts, developed in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from the Police Athletic League are processed, and provide basis for special analyses.
Duration: August 1962-August 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Police Athletic League; New York State Employment Service.

17-Q-20 AN EVALUATION OF THE ROCHESTER YOUTH AND WORK PROGRAM

Purpose: To evaluate effectiveness of a special program for school dropouts, developed by the Rochester-Monroe County Youth Board in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from Rochester Youth and Work Program are processed, and provide basis for special analyses.
Duration: April 1962-April 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Rochester-Monroe County Youth Board; New York State Employment Service.

17-Q-21 AN EVALUATION OF THE SYRACUSE YOUTH AND WORK PROGRAM

Purpose: To evaluate effectiveness of a special program for school dropouts, developed by the Onondaga County Youth Board in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from Syracuse Youth and Work Program are processed, and provide basis for special analyses.
Duration: February 1962-February 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Onondaga County Youth Board; New York State Employment Service.

17-Q-22 AN EVALUATION OF THE URBAN LEAGUE YOUTH AND WORK PROGRAM

Purpose: To evaluate the effectiveness of the special Urban League program for school dropouts, developed in conjunction with the New York State Division for Youth and the New York State Employment Service.
Subjects: Currently unemployable 16 to 18 year old school dropouts.
Methods: Data collected routinely from Urban League are processed, and provide basis for special analyses.
Duration: October 1962-October 1967.
Investigator(s): Arthur Pearl, Ph.D., Center for Youth and Community Studies, Howard University, Washington 1, D. C. (formerly Director of Research, New York State Division for Youth, Albany 10, N. Y.)
Cooperating group(s): Urban League; New York State Employment Service.

EXCEPTIONAL CHILDREN

Retarded

17-S-1 COMMUNITY ACCEPTANCE OF THE RETARDED CHILD

Purpose: To examine attitudes of the public and of community leaders toward mentally retarded children in the community; to examine variables pertinent to the shaping of these attitudes.
Subjects: About 2500 interviews distributed among the following: (1) random sampling of the public in four cities of Washington State; (2) community leaders; (3) sampling of neighbors of families with a retarded child; and (4) parents of a retarded child and neighbor parents of a "normal" control child of same age and sex.
Methods: Direct interview guided by structured questionnaire and interview procedure.
Duration: June 1963-April 1964.
Investigator(s): R. S. Justice, M.S.W., Assistant Professor of Social Work, University of Washington School of Medicine, Seattle, Wash., and Theodore D. Tjossem, Ph.D., Special Assistant for Mental Retardation, Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare, Washington, D. C., 20201. (Formerly Assistant Professor of Pediatrics and Psychiatry, University of Washington School of Medicine.)
Cooperating group(s): Washington State Department of Health.
Publication: Plan publication in journals; possibly full study will be published in cooperation with Washington State Department of Health.

17-S-2 MENTAL RETARDATION IN VICTORIA, AUSTRALIA

Purpose: To discover number of mentally retarded children under age 16 in Victoria at the end of 1962, including children in institutions, those attending outpatient clinics, day training centers, and special schools. To assess facilities for these children.
Duration: 1963-1964.
Investigator(s): Cleo H. Macmillan, B.A., Research Assistant, Mental Health Research Institute, Parkville, N.2, Victoria, Australia.
Cooperating group(s): Victorian Council for Mental Hygiene.
Publication: Booklet and articles are planned.

17-S-3 IDENTIFICATION OF MILD RETARDATION IN FIRST TWO YEARS OF LIFE

Purpose: (1) To determine at what age and by what developmental signs one can detect the mild forms of retardation in the absence of specific physical signs; (2) to collect additional information about children of this category; and (3) to determine the value of early diagnosis.
Subjects: Children who show delayed motor, social, and language development in the first two years of life, excluding those children with clear-cut physical signs known to foreshadow retarded development.
Duration: April 1963-April 1966.
Investigator(s): Sonya Oppenheimer, Ph.D., Department of Pediatrics, and Jane W. Kessler, Ph.D., Director, Mental Development Center, Western Reserve University, Cleveland 6, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

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17-S-4 EPIDEMIOLOGY OF MONGOLISM AND CONGENITAL ANOMALIES OF THE CENTRAL NERVOUS SYSTEM IN VICTORIA, AUSTRALIA, 1942 TO 1962

Purpose: To establish an association between virus infection and Mongolism, and congenital CNS anomalies.
Duration: 1956-continuing.
Investigator(s): Alan Stoller, Chief Clinical Officer, Mental Health Authority, and Robin D. Collmann, Research Psychologist, Mental Health Research Institute, Victoria, Australia.
Publication: Numerous papers in medical journals.

17-S-5 CONGENITAL TOXOPLASMOSIS IN MENTAL DEFICIENCY

Purpose: To estimate the contribution of congenital toxoplasmosis to the pool of mental deficiency.
Subjects: Moderately and severely retarded children.
Methods: Survey conducted during administration of new skin test for detection of toxoplasmosis.
Duration: 1962-December 1963.
Investigator(s): Dr. David Pitt, Pediatrician, and Dr. Alice Garvan, Pathologist, Children's Cottages, Kew E.4, Victoria, Australia.
Publication: Medical Journal of Australia during 1964.

17-S-6 STRUCTURE AND PROPERTIES OF MONGOLOID GAMMA-GLOBULIN

Purpose: Immediate objective is to study ability of gamma-globulins in Mongoloids to function in the production of antibodies. Long-range goal is the elucidation of differences in structures of gamma-globulins of Mongoloids and normal controls.
Subjects: 70 Mongoloids, their parents and siblings in the first phase of study; Mongoloids and normal controls in the second phase.
Methods: Study of the concentrations and mobilities of gamma-globulins in the Mongoloids, parents and siblings; comparison of the structures of polypeptide fractions obtained from gamma-globulins of Mongoloids and those of normal controls.
Findings: Significant differences found in the structures of polypeptide fractions obtained from gamma-globulins of Mongoloids and those of normal controls.
Investigator(s): Gordon H. Pritham, Ph.D., Professor of Physiological Chemistry, and Malcolm Cronlund, Graduate Assistant, Pennsylvania State University, University Park, and Medical Staff, Selinsgrove State School and Hospital, Selinsgrove, Pa.
Cooperating group(s): Pennsylvania State Department of Public Welfare.

17-S-7 FAMILY FACTORS RELATED TO PLACEMENT OF MONGOLOID CHILDREN

Purpose: To examine characteristics, experiences, and attitudes of families with a Mongoloid child in the home; to seek significant factors which may suggest guides for counseling parents toward placement decisions which support favorable family functioning.
Subjects: Drawn from over 100 families with one Mongoloid child under nine years of age, living with both parents in metropolitan Newark, New Jersey; response rate over 70 percent.
Methods: Statistical comparison and factor analysis of social data and

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parental responses to precoded interview schedule and attitude rating scales administered to mother and father separately. Rating of level of family functioning on standardized scale.
Duration: March 1963-February 1965.
Investigator(s): Nellie D. Stone (D.S.W. Candidate), Coordinator, Guidance Clinic of the Essex Unit, New Jersey Association for Retarded Children, 100 N. Arlington Ave., East Orange, N. J.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in mental deficiency and social work journals.

17-S-8 MOTIVATIONAL FACTORS IN THE PERFORMANCE OF THE RETARDED

Purpose: Exploration of background and etiological, intellectual, and situational correlates of responsivity to social reinforcement.
Subjects: Normal and retarded children.
Methods: Learning and persistence measures of reinforcer effectiveness.
Findings: Social deprivation, M.A., and a variety of experimental manipulations affect social reinforcer effectiveness.
Duration: September 1962-September 1967.
Investigator(s): Edward Zigler, Ph.D., Associate Professor, and Earl C. Butterfield, Ph.D., Research Associate, Department of Psychology, Yale University, New Haven, Conn.
Cooperating group(s): Public schools and institutions for the mentally retarded in Connecticut, Massachusetts, Missouri, and Texas; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-S-9 DOMINANCE HIERARCHY OF A GROUP OF PROFOUNDLY RETARDED CHILDREN

Purpose: To describe the dominance hierarchy and the effects of psychopharmacologic drugs on the status ranking of profoundly retarded children.
Subjects: Six females, mean age 12 years, I.Q.'s less than 25.
Methods: Each subject is paired with his five peers (total of 15 pairs). Each pair is tested in a modified Wisconsin General Test Apparatus, sitting 36 inches apart, facing each other. A trial consists of placing a piece of popcorn midway between each subject and simultaneously raising the transparent panels directly in front of them. One minute is permitted for retrieval of the popcorn, and one score point is given for each retrieval. There are 16 trials per session, and 10 replications per phase. The effects of psychopharmacologic drugs are systematically tested between control phases.
Duration: July 1963-June 1964.
Investigator(s): John H. Hollis, M.S., Research Associate, and Pamela K. Gunnell, Bureau of Child Research, University of Kansas, Lawrence, and Parsons Research Project, Parsons State Hospital, Parsons, Kans.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Planned in *Journal of Abnormal and Social Psychology*, *American Journal of Mental Deficiency*, or *Child Development*.

17-S-10 VARIABLES UNDERLYING INSTITUTIONALIZATION OF MENTALLY RETARDED

Purpose: Determination of influents in the parental decision to commit

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children to institutions for the retarded and especially to locate sources of influence where commitment is deemed inappropriate to the staff.
Subjects: Children under ten years of age committed, but not yet admitted, to a state hospital for the retarded.
Methods: Social work interview of parents and child, psychological testing of parents and child, physical and psychological examination of child.
Duration: June 1963-June 1965.
Investigator(s): V. A. Stehman, M.D., Deputy Director, Michigan State Department of Mental Health, Lansing 13, Mich., and Robert I. Jaslow, M.D., Superintendent, Plymouth State Home and Training School, Northville, Mich. (Reported by Gwen Andrew, Ph.D., Chief, Research Section, Michigan State Department of Mental Health.)
Cooperating group(s): Michigan State Department of Mental Health; Plymouth State Home and Training School; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results will be published in a final report of the project.

17-S-11 OCCUPATIONAL TRAINING CENTER FOR THE MENTALLY RETARDED

Purpose: To develop an occupational and vocational habilitative program for retardates over 16 years of age by using, extending, and refining evaluation and training methods and techniques developed in such similar VRA-related projects as the MacDonald Training Center in Tampa, Florida.
Subjects: Intellectually handicapped, untrained adolescents and young adults.
Investigator(s): Dolores S. Benedict, Director, Palm Beach Habilitation Center, P. O. Box 1148, Lake Worth, Fla.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

Physically handicapped

17-T-1 BEHAVIORAL CLASSIFICATION OF NEUROLOGICAL PATIENTS

Purpose: To determine types of changes that have taken place in functional relations between behavior and its controlling variables in neurological patients. Eventually, to develop a classification of behavioral deficit in terms of developmental standards.
Methods: Study will consist of research in normal and abnormal infant behavior and mental development, with emphasis upon diseases of the child's nervous system. Established behavioral conditioning methods will be used and new techniques will be developed to assess behavior repertoires at different ages, from infancy through adulthood.
Investigator(s): Murray Sidman, Ph.D., Assistant Professor of Psychology, Department of Neurology, and Lawrence T. Stoddard, Assistant Psychologist, Massachusetts General Hospital, Boston, Mass.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-T-2 PERSONALITY DEVELOPMENT OF THE BLIND CHILD

Purpose: To determine the different kinds of impact observed to influence the personality development of blind children.
Subjects: Blind children in pediatric and psychiatric clinics, schools for the blind, institutions, and in their own homes.
Methods: Clinical observation, diagnostic testing in above settings plus interviewing and counseling parents.
Findings: A variety of influences within the family setting, including a wide range of parent reactions to the blindness of their child and its effects on the child's development will be evaluated.
Duration: 1940-1964.
Investigator(s): Anna S. Elonen, Ph.D., Professor of Psychology, and Albert C. Cain, Ph.D., Assistant Professor of Psychology and Psychiatry, University of Michigan, Ann Arbor, Mich.
Publication: One paper has been published in New Outlook for the Blind; another was presented at 1963 annual meeting of American Orthopsychiatric Association.

17-T-3 COGNITIVE FUNCTIONS AND SELF-ATTITUDES IN THE DISABLED

Purpose: To determine effect of congenital deafness on verbal behavior, verbal learning, concept formation, and judgment.
Subjects: Deaf subjects, 10 to 20 years of age; controls who are not deaf, in same age ranges.
Methods: Comparisons of deaf and normals are made on: (1) word association tasks; (2) measures of rote verbal learning; (3) tests of judgments concerning various types of relations among words; and (4) various measures of cognitive style characteristics.
Findings: (1) In verbal learning and in various types of word association tasks, the deaf rely heavily on morphological structure of words rather than on meaningful connections between words; (2) deaf subjects have very different word associations than normals as measured by a number of different association tasks and with respect to a large number of dimensions of association; and (3) deaf subjects are highly dependent on others in locus of control and locus of evaluation tasks.
Duration: July 1961-June 1964.
Investigator(s): Jum C. Nunnally, Ph.D., Professor and Head, and Richard Blanton, Ph.D., Associate Professor, Department of Psychology, Vanderbilt University, Nashville, Tenn.
Cooperating group(s): Wilerson Hearing and Speech Clinic; public schools in Tennessee; schools for the deaf in Kentucky and Tennessee; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: A series of journal articles is being prepared.

17-T-4 PSYCHOLINGUISTIC BEHAVIOR OF DEAF CHILDREN

Purpose: To investigate linguistic functioning in deaf children in the following three areas: (1) development of word meanings; (2) development of word associations; and (3) acquisition of morphological habits that can be described in terms of grammatical rules. Area of investigation proposed is the study and development of tools and methods for assessment of linguistic functioning that will allow subsequent assessment and generation of normative data for the linguistic functioning of deaf children.
Subjects: Deaf children who have attained a reading grade of at least 1.5 and up, from schools for the deaf in the New York city area; hearing controls in

certain investigations.
Methods: Word comprehension tasks, both at expressive and receptive levels, and word association tasks at expressive levels will be administered. Ability to use words in their correct linguistic forms in sentences will be assessed by tapping the child's receptive and productive control of morphological habits that have been acquired.
Duration: January 1963-December 1965.
Investigator(s): Joseph Rosenstein, Ph.D., Director of Research, Lexington School for the Deaf, 904 Lexington Ave., New York 21, N. Y.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Planned in appropriate professional journals.

17-T-5 A PSYCHIATRIC STUDY OF KLINEFELTER'S SYNDROME

Purpose: To evaluate: (1) relationship between chromosomal aberrations, endocrine disturbances, physical changes, and self and social identity; and (2) effect of these upon social behavior.
Subjects: Adolescents aged 14 to 20 years, having small atrophic testis, nuclear chromatin positivity, an altered chromosome pattern, depressed or normal urinary 17-ketosteroids, and elevated urinary gonadotropins; control group matched for age, sex, and institutionalization or noninstitutionalization.
Methods: Three clinical interviews with subjects, with particular attention to emotional, psychosexual, and psychosocial development. Minnesota Multiphasic Personality Inventory, Thematic Apperception Test, and Projective Drawings Test administered to subjects.
Duration: Not reported-1964.
Investigator(s): Melvin Gravitz, Ph.D., Research Associate and Consultant in Clinical Psychology, James N. Kvale, B.A., Senior Medical Student, and Jacob Fishman, M.D., Assistant Professor of Psychiatry, College of Medicine, Howard University, Washington 1, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-T-6 STUDY OF PSYCHOSOCIAL ASPECTS OF THALIDOMIDE-INDUCED LIMB DEFORMITIES IN ONE HUNDRED FAMILIES IN MUNICH, GERMANY

Subjects: 100 families of children with thalidomide-induced limb deformities including phocomelia, radiusaplasia, and hypoplasia.
Methods: Unscheduled interview which is protocolled and later recorded according to a questionnaire. Children examined by means of the Griffiths Mental Development Scale, Gesell Developmental Schedules, and Minnesota Preschool Scale. Parents' reactions to deformity are studied, as well as their educational and child-rearing practices with the dysmelic child. Extent of treatment and professional help offered to parents ascertained. Other social influences upon parents also studied.
Findings: Little statistical correspondence between degree of motor handicap and mental development of the 60 children studied so far. Most predictive single variable is amount and quality of actual social interaction. Correspondence between educational techniques of the mothers and their psychic adaptational reaction to the handicap is well established.
Duration: January 1963-December 1965.
Investigator(s): Hellmut Strasser, Ph.D., Director, Research Department, Association for Mental Health, Widenmayerstrasse 24, Munich 22, Germany.
Cooperating group(s): Municipal Children's Hospital, Munich; Research Depart-

ment, Munich University Policlinic for Children; Dysmelia Center, University Children's Hospital, Munich; Association for the Aid of Crippled Children, New York.

17-T-7 THYROTOXIC CHILDREN, INDIVIDUAL AND FAMILY DYNAMICS

Purpose: To study and draw conclusions about character patterns and modes of interaction found in thyrotoxic children and their families, and to compare the children in their thyrotoxic state with the same children in a euthyroid state.
Subjects: Nine thyrotoxic children, hospitalized for metabolic studies while they were actively hyperthyroid; three former thyrotoxic patients, evaluated while euthyroid after treatment for thyrotoxicosis; parents of all 12 children.
Methods: All 12 children and their parents have been studied by careful psychiatric and psychiatric case work interviews. Nurses notes and observations and extensive psychological testing were used in analysis.
Findings: Preliminary impressions indicate that subjects do not have an exact, describable character structure common to all. However, several factors have turned up repeatedly. Children were consistently somewhat extreme in their reactions, being either very submissive or very rebellious, very rigidly conforming, or quite nonconforming, very active or very passive, with few in the mid-range while they were hyperthyroid. The thyrotoxicosis apparently acted somewhat like an increase of instinctual energy and children increased their own defensive patterns, exaggerating their usual character structures. Conflicts regarding dependency, aggression, strivings toward perfection, and need to control others were evident. Families were intensely ambitious or very hard working, usually rigid and conforming. Considerable emotional distance was found in the families, where often both parents worked and fathers were out of the home in the evenings. Parents were immature with personality growth arrested at early stages of development making it easy for them to use their children vicariously in their expectations. Parents themselves had major problems in communicating with appropriate effect, and were hindered by their fears of aggression and their many dependency needs. Psychological testing thus far has not shown any clear trends.
Duration: February 1962-July 1964.
Investigator(s): David F. Freeman, M.D., Clinical Assistant Professor, Department of Psychiatry, North Carolina Memorial Hospital, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Department of Psychiatry, North Carolina Memorial Hospital; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted for publication.

17-T-8 COGNITIVE AND ATTENTIVE DEFICITS IN CHILDREN WITH TEMPORAL LOBE AND CENTRENCEPHALIC EPILEPSY

Purpose: To investigate psychoneurological disorders in children.
Subjects: Three patient groups (left temporal, right temporal, and centrencephalic) will be matched with a normal group with respect to I.Q. and age.
Methods: The subjects will be administered: (1) Wechsler Intelligence Scale for Children; (2) a test of sustained attention; (3) verbal and nonverbal (auditory and visual) tasks of immediate memory; and (4) learning and/or delayed memory tasks.
Duration: January 1962-January 1964.
Investigator(s): Paul Fedio (Ph.D. Candidate), Staff Psychologist, Handicapped

Children's Clinic, 19th and C Sts., S. E., Washington 3, D. C.
Publication: Planned in psychological journals.

17-T-9 AN EFFORT TO DETERMINE WHETHER IRREGULAR BRAIN WAVE PATTERNS OF EPILEPSY AFFECT CHILDREN'S MOTOR-SENSORY PERFORMANCE AND ATTENTIVENESS

Purpose: To study and quantify any decrease in perception, performance, and attention correlated with inter-ictal subclinical EEG abnormalities, namely bursts or spikes in epileptic children.
Subjects: Epileptic children with centrencephalic or temporal lobe seizures.
Methods: Simultaneous EEG and tests of auditory and visual recall, reaction time, continuous performance, and the Bourdon-Weismer Stipple Dot Test will be correlated and scored.
Duration: June 1962-June 1964.
Investigator(s): Gregory S. Ferriss, M.D., Marilyn M. Dorsen, M.A., and Robert Dorsey, Ph.D., School of Medicine, Louisiana State University, New Orleans, La.
Cooperating group(s): The Epilepsy Foundation.

17-T-10 REVISE AND RESTANDARDIZE A TEST FOR HANDICAPPED

Purpose: To revise the Hiskey-Nebraska Test of Learning Aptitude developed by the investigator in 1941 for use with young deaf children.
Subjects: Deaf, retarded, and normal groups of children and youth.
Methods: Items in the scale will be revised and modernized. New items will be added, thus extending the scale from the present 4 to 10 year range to a range of 3 to 16 years. All items will be tested on deaf, retarded and normal children and youth. After a tryout on deaf and hearing children, an item analysis will be made and final scale will be assembled. Revised scale will be standardized separately on deaf children and on hearing children.
Duration: February 1963-February 1965.
Investigator(s): Marshall S. Hiskey, Ph.D., Professor of Educational Psychology, Department of Neurology and Psychiatry, University of Nebraska College of Medicine, Omaha, Nebr.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

17-T-11 STANDARDIZATION AND VALIDATION OF A DIAGNOSTIC TEST BATTERY FOR LANGUAGE IMPAIRED CHILDREN

Purpose: To develop a battery of tests which will be clinically useful to determine conceptual and linguistic abilities of "aphasic children" said to be delayed in their development of language.
Subjects: 30 language-delayed children with neurological signs; 30 language-delayed children without neurological signs; and 30 normal children; all subjects ages 6 to 8.
Methods: Administration of various relevant tests to determine their usefulness in a diagnostic examination of children with language delays, and to provide standardization data on those which prove useful.
Duration: July 1962-June 1967.
Investigator(s): Joseph M. Wepman, Ph.D., Professor, Departments of Surgery and Psychology, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Relevant professional journals.

17-T-12 COMMUNITY PROGRAM OF ORIENTATION AND MOBILITY SERVICES FOR THE BLIND IN MISSOURI

Purpose: To effect and test establishment of a statewide program of orientation and mobility training for blind persons under auspices of a family centered casework agency.
Subjects: Young blind children and elderly blind persons.
Methods: Mobility training of young blind children to appraise ages at which various phases of travel training can suitably be introduced. Values of limited travel training for older persons and orientation training for recently blinded adults receiving post-blindness hospital care will be explored.
Duration: January 1963-December 1964.
Investigator(s): Thomas J. O'Donnell, John K. Rowland, Dudley L. Baker, and Thomas J. Murphy, Society of St. Vincent de Paul, 4140 Lindell Blvd., St. Louis 8, Mo.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

17-T-13 INTEGRATING THE HANDICAPPED CHILD INTO THE COMMUNITY CENTER

Purpose: To examine integration of handicapped children into play groups of nonhandicapped children; to explore and analyze techniques required to facilitate this process; to evaluate effect of integration program upon children, institution, and staff; to determine practicality of extending program to other centers.
Subjects: A group of 20 to 35 children, aged 5.5 to 13 years, diagnosed as orthopedically handicapped according to criteria of New York City Department of Health. Subjects are being integrated into the regular ongoing program of the Mosholu-Montefiore Community Center in Bronx, N. Y. (a member agency of the Associated YM-YWHA's of Greater New York).
Methods: Records, observations and Flannigan's Critical Incident Technique used during initial exploratory phase. Movement scales and sociometric devices to be developed. Categorization of unstructured interviews according to techniques developed by Richardson, et al., of the Association for the Aid of Crippled Children. A panel of parents (69 to 100 pairs) are being interviewed periodically over a five-year period to determine perception of changes in child's social behavior and development.
Duration: 1960-1966.
Investigator(s): Arthur Schwartz, M.S.S.S., Project Director, Marvin Lieberman, M.S.W., Project Coordinator, and Irene S. Cohen, M.S.S., Caseworker, Associated YM-YWHA's of Greater New York, 33 W. 60th St., New York 23, N. Y.
Cooperating group(s): Association for the Aid of Crippled Children; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Monograph by the author, 1962; article to appear in *Program Aids* (National Jewish Welfare Board), 1963; future articles as indicated, and a summarizing monograph at completion of study.

THE CHILD IN THE FAMILY

Family background and relations

17-U-1 RELATIONSHIP OF MATERNAL EMOTIONS DURING PREGNANCY TO LABOR AND DELIVERY AND TO POSTNATAL STATUS OF THE INFANT

Purpose: To test hypotheses concerning relationship between acute emotional stress during pregnancy and the psychosomatic functioning of the infant.
Methods: Inventory devised for assessment of maternal emotions during pregnancy; scores on inventory compared with obstetrical records on labor and delivery and on assessments of infant, including neurological examination and observations of infants' behavior in the nursery during first ten days of life. Cross-validating study on Dutch population will be made to check an earlier pilot study in which maternal emotions during pregnancy were found to be related to length of labor and (for primaparae) to lacerations during delivery.
Duration: January 1963-not reported.
Investigator(s): Earl S. Schaefer, Ph.D., Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-U-2 THE SOCIAL ADJUSTMENT AND ATTITUDES OF YOUNG TWINS

Purpose: To reveal influence of various types of siblings on child experience range, the stimulation, companionship, and degree of sex role reinforcement received; to reveal effects of sibling character on social and self attitudes, abilities, and skills the child acquires.
Subjects: Urban, white, native-born, 5 and 6 year old twins from two-child families; a matched singleton control group.
Methods: Study deals with inter-twin type and twin-singleton differences. The comparative singleton population was stratified in such a way as to make it possible to put the twins and sub-groups of singletons on a sib-age-difference continuum as well as match sub-groups of singletons on the sex of sib variable. As a by-product of the twin study, 50 twins prematurely born were matched individually with 50 born at term on zygosity, race, age, social class, sex of sib, and family complexity and intactness. A comparison of these two carefully matched groups on the basis of all measures used in the twin study should illuminate to some extent the question of effects of prematurity on child development.
Duration: Not reported-early 1964.
Investigator(s): Helen L. Koch, Ph.D., Professor Emeritus, Department of Psychology, University of Chicago, Chicago 37, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-U-3 CHILDREN WITH SCHIZOPHRENIC PARENTS

Purpose: To compare a group of children having at least one schizophrenic parent with a group of children whose families have no history of schizophrenia for past two generations. To observe conditions surrounding onset of schizophrenia; hopefully, to differentiate individuals who manifest schizo-

phrenia from those who do not by means of current assessment techniques.
Subjects: 200 children, 10 to 20 years of age, with mothers chronically and severely schizophrenic; control group of 100 children whose parents and grandparents had no psychiatric disturbances, matched for age, sex, socioeconomic status, and educational attainment.
Methods: Psychophysiological conditioning, stimulus and mediated generalization; psychophysiological response to mild stress; MMPI; WISC; specially devised association techniques; psychiatric interview; social development interview; school reports; adjective check lists.
Findings: Preliminary results: experimental group exceeds control group in response to stress, stimulus generalization, and time to recover from stress; no noticeable difference in intelligence between groups.
Duration: November 1962-not reported.
Investigator(s): Sarnoff A. Mednick, Ph.D., Associate Professor of Psychology, University of Michigan, Ann Arbor, Mich., and Director, Psychological Institute, and Fini Schulsinger, M.D., Chief Physician, Psychiatric Department, Kommunehospitalet, Copenhagen, Denmark.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-U-4 CHILD DEVELOPMENT FOLLOWING MATERNAL MENTAL ILLNESS

Purpose: To discover if there is an association between the fact of a child's mother being hospitalized for mental illness during the child's first 12 months of life and evidence of psychological maladjustment of the child at age 11 or 12.
Subjects: All children born alive within 12 months preceding hospitalization to a 40 percent systematic sample of all women, aged 15 to 44 inclusive, ever married, and admitted for the first time to public, private or Veterans Administration mental hospitals in Massachusetts during 1950. When originally assembled, this group contained 69 children. The comparison group consists of an equal number of children matched for live birth, age, place of birth, sex, age of mother, race of mother, and occupation of father. Selection of the control group was an otherwise random process of taking the next qualifying individual in the chronologically ordered registry of births in which each study case was found.
Methods: Written communication with appropriate school personnel regarding grade level at which child is functioning in terms of nationally standardized achievement test scores, and measurement of intelligence by group or individual intelligence tests. Academic functioning is used as an empirical indicator of psychological adjustment.
Investigator(s): Samuel G. McClellan, M.D., Research Fellow in Community Mental Health, School of Public Health, Harvard University, Cambridge, Mass. (Reported in Sources of Morbidity Data, 1962.)

17-U-5 CHILDREN'S RESPONSE TO PARENT SUICIDE

Purpose: (1) To trace the impact of a parent suicide, both in its immediate and long-term effects upon the suicide's children; (2) to map out the factors determining the various outcomes of such a family tragedy; and (3) to explore the possibilities such incidents contain for immediate preventive/therapeutic intervention.
Subjects: Initial subjects are inpatient and outpatient children seen at the Children's Psychiatric Hospital, University of Michigan Medical Center. At a later point, subjects are to be sought and included from nonclinical populations.
Methods: Essential approach is clinical, using the combined materials from

referrals, developmental histories, psychodiagnostic testing, psychiatric interviews plus, in a great many instances, notes from long-term extensive psychotherapeutic contact with the children.
Findings: Data analysis in early stages already shows the immense impact of parent suicide upon the child directly, and upon the child as effected by the suicide's impact upon other family members. The impact of attempts to evade or cover the suicide is noted, as is the frequent intention of the parent who committed suicide to have an effect upon one or more of the children surviving. The children's need to deny the nature of the death and the vicissitudes of their own guilt and varied defenses against the object-loss will be analyzed.
Duration: Summer 1962-fall 1963.
Investigator(s): Albert C. Cain, Ph.D., Assistant Professor of Psychology and Psychiatry, University of Michigan, Ann Arbor, Mich., and Irene Fast, Ph.D., Chief Psychologist, San Fernando Valley Child Guidance Center, 14852 Ventura Blvd., Sherman Oaks, Calif.
Cooperating group(s): Grant Foundation.
Publication: A brief article will probably be submitted to a child clinical journal; a longer version may be presented in prospective monograph on object-loss and bereavement.

17-U-6 FAMILY INTERACTION AND TYPE OF CHILD DISTURBANCE

Purpose: To compare three groups of parents on several behavioral indices of conflict, dominance, anxiety, overt and covert sex identification, and congruency in reporting how they would handle typical childhood problems.
Subjects: White, middle class husbands and wives with intellectually normal male children, aged 6 to 11. Clinic children have been referred for treatment of either conduct (essentially aggressive) or personality (basically over-inhibited) disturbances.
Methods: Three groups of families consist of Clinic-Conduct, Clinic Personality, and Non-Clinic control sample. Parents rate their children on a problem checklist, indicate privately how they would cope with 12 typical child misdemeanors, and fill out measures of overt and covert sex identification. Child then indicates how he believes each of his parents would handle the problem situation and is administered measures of sex typing and identification. Family phase follows in which parents publicly discuss how they would deal with half the problems; child is then included in discussion of remaining six problems.
Duration: September 1962-August 1964.
Investigator(s): Joseph Becker, Ph.D., Assistant Professor of Psychology, and Grant Fairbanks, Ph.D., Professor and Director of Speech Research Laboratory, University of Illinois, Urbana, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-U-7 FAMILY STRUCTURE AT A TIME OF REFERRAL TO A NAVY CHILD GUIDANCE CLINIC

Purpose: To investigate the relevancy of family or parental stress to the time of referral to a child guidance clinic. To define families applying to the Navy's first child guidance clinic.
Subjects: All families (N=56) applying to the Child Guidance Clinic, U. S. Naval Hospital, Oakland, California, December 10, 1962-March 15, 1963.
Methods: Comparison of findings from questionnaires, psychological tests, and clinical examination of both parents and child. This pilot clinic was utilized by older career Navy men who averaged more than 14 years of service and were senior petty or commissioned officers. Patients were most often the

oldest son. Most frequent complaints were behavioral problems of long standing and parents blamed themselves or others but not the child.
Duration: October 1962-July 1963.
Investigator(s): William J. Dickerson, M.D., 100 Sir Francis Drake, Kentfield, Calif. (formerly Director, Child Guidance Clinic, U. S. Naval Hospital, Oakland, Calif.)
Cooperating group(s): Bureau of Medicine and Surgery, Department of the Navy.
Publication: Manuscript submitted.

17-U-8 FAMILY LIFE EDUCATION AND GROUP WORK PROJECT

Purpose: To discover what impact educational and group work services with parents will have on juvenile delinquent behavior.
Subjects: Two experimental and two control groups of parents or responsible relatives of children under juvenile court supervision, selected randomly.
Methods: Biweekly formal educational classes on psychodynamic and sociocultural influences in development of the child. Alternate biweekly group work services. Measures to test knowledge, attitudes, and behavior used before and after treatment; two follow-up studies conducted six months and one year after treatment.
Duration: October 1962-October 1965.
Investigator(s): Bernard J. Coughlin, S. J., Phillip A. Fellin, and John P. O'Brien, School of Social Service, St. Louis University, St. Louis 8, Mo. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1962-63.)
Cooperating group(s): President's Committee on Juvenile Delinquency and Youth Crime.

Child rearing attitudes and practices

17-V-1 A CORRELATION STUDY OF CHILD-REARING ATTITUDES AND MARITAL SATISFACTION

Purpose: To investigate relationship between child-rearing attitudes and satisfaction with marriage.
Subjects: 120 married couples having children 6 months to 12 years of age.
Methods: Locke Marital Satisfaction Inventory and Terman Self-Rating Happiness Scale, correlated with Parental Attitude Research Instrument.
Duration: 1959-1963.
Investigator(s): Eleanore Braun Luckey, Ph.D., Professor and Head, and E. Duwayne Keller, Ph.D., Assistant Professor, Department of Child Development and Family Relations, University of Connecticut, Storrs, Conn.
Publication: Planned in professional journals.

17-V-2 CHILD REARING AND CHILD BEHAVIOR IN GREECE AND LEBANON

Purpose: To ascertain whether there are relationships between certain types of child rearing and characteristic behavior of children.
Subjects: Six and seven year old children in a Greek and a Lebanese village.
Methods: Mothers will be interviewed regarding their child-rearing practices, using the interviewing schedules developed in previous studies (see Research Relating to Children, Bulletin 16). Children's behavior will be observed in

playground or courtyard situations, and recorded following a classification scheme developed by the Whitings and associates at Palfrey House, Harvard University.
Duration: September 1963-June 1965.
Investigator(s): Edwin Terry Prothro, Ph.D., Director, Center for Behavioral Research, American University of Beirut, Beirut, Lebanon.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.
Publication: Publication is planned in an American psychological journal.

17-V-3 FREEDOM IN MAKING PERSONAL DECISIONS AS PERCEIVED BY PUERTO RICAN NINTH GRADE GIRLS

Purpose: To investigate extent to which girls were achieving their developmental task of gaining independence from parents, using as a criterion the amount of freedom they perceived was allowed them in making personal decisions. Areas of decision-making considered were activities outside the home, peer relationships, handling money, and persons making decisions. Also studied were the girls' and mothers' perceptions of freedom as well as sources of disagreement.
Subjects: 750 ninth grade girls in 57 urban and rural, public and private schools of Puerto Rico; 167 mothers.
Methods: Variables explored were residence, socio-economic level, and age. Data were collected by a questionnaire for the girls in school and by personal interviews with the mothers in their homes.
Findings: Findings show that the families are restrictive. Girls' freedom to make decisions for their personal lives was below the level that a panel of judges had decided was desirable for girls of these ages. Parents made more decisions about boys and staying away from home than about friends, handling money, and activities. Disagreements were most frequent in boy-girl relationships and outside activities, and less frequent in relation to clothes and grooming, privacy, and handling money. Mothers reported fewer disagreements than did girls. Mothers believed that adolescent girls should be allowed more freedom in activities outside the home than the girls believed they were allowed, while the opposite was found in regard to freedom concerning persons making personal decisions.
Duration: Completed 1962.
Investigator(s): Maria Socorro Lacot, Doctoral Candidate, Iowa State University, Ames, Iowa. (Reported in Journal of Home Economics, March 1963.)

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SOCIAL, ECONOMIC, AND CULTURAL INFLUENCES

17-W-1 THE FACTOR OF ALLOPSYCHIC ORIENTATION IN MENTAL HEALTH

Purpose: To construct a model of the interconnections between treatment of time, space, the strange, and the unknown in the wider culture, as mediated through the ways in which young children are reared and through specific media that have impact on the formation of children's allopsychic orientation, particularly mass media and formal school materials and practices, with special reference to individual differences in sensory-motor functioning under conditions of rapid change in cultural concepts of time and space.
Methods: Materials from five Pacific island cultures (Manus, Samoa, Arapesh, Iatmul, and Bali), for four of which there are materials from restudies which provide time depth on effects of cultural change, will be analyzed as an interconnected cluster and contrasted, individually and as a cluster, with materials on American Culture, particularly in regard to changes which have occurred in the last five years. Case history materials from the hypo- and hyper-acute, using different sensory modalities, combined with a comparison of educational practices in different modern societies and certain peasant societies undergoing rapid change will be used to illuminate the cultural materials. Research is expected to provide insight on redundancy requirements of whole cultures and on ways in which these requirements alter in changing cultures.
Duration: January 1962-June 1964.
Investigator(s): Margaret Mead, Ph.D., and Rhoda Metraux, Ph.D., American Museum of Natural History, 77th St. and Central Park West, New York, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-W-2 A RORSCHACH STUDY OF PERSONALITY AND CULTURE TRAITS--A CROSS-CULTURAL COMPARISON BETWEEN TWO GROUPS OF SIMILAR BIOLOGICAL DESCENT

Purpose: To explore the relation between personality traits and culture traits among people of a distinct population.
Subjects: Two groups, 15 males each, now 20 to 50 years of age. First group born and reared to at least age 15 in a remote mountain village in Italy; second group direct descendents of the Italian village population, born and reared in New York City.
Methods: Cross-culture and cross-personality comparison. Personality traits determined by means of the Rorschach, following Piotrowski. Culture traits determined by participant observation and following Linton.
Findings: Significant differences in personality traits between groups were found.
Duration: Not reported-February 1964.
Investigator(s): Leopold M. Macari (Ph.D. Candidate, New York University), 2430 Bronxwood Ave., Bronx 69, N. Y.
Publication: University Microfilms, Inc.

17-W-3 COURSE OF THE HUMAN SMILE AND VOCAL BEHAVIORS IN FOUR CHILD-REARING ENVIRONMENTS IN THE FIRST 18 MONTHS OF LIFE

Purpose: To examine the human smile and vocal behaviors in first 18 months

of life and to contrast effects of widely differing environmental conditions for adaptive and social learning.
Subjects: Approximately 700 Israel infants, aged 1 to 18 months, from residential, institution, day nursery, Kibbutz, and middle class town family environments.
Methods: Observation at a monthly birth anniversary by a woman not completely unfamiliar to the infants. Standard procedure of approach, observation, and recording employed.
Findings: Behavior categories proved quite reliable in use. Institution and day nursery subjects smiled at a later age and vocalized less frequently than Kibbutz and family subjects.
Duration: 1960-1965.
Investigator(s): Jacob L. Gewirtz, Ph.D., Research Psychologist, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): Department of Psychology, Hebrew University of Jerusalem; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Preliminary report to appear in B. Foss (Editor), Determinants of Infant Behaviour, Vol. 3, Wiley, New York 1964; monograph report to be published.

17-W-4 A STUDY OF CONCEPTUALIZATION AND CONCEPT MEANINGS AND COMPARISON OF THE CONCEPTUAL DEVELOPMENT OF CHILDREN AND YOUNG ADULTS FROM DIFFERENT LANGUAGE BACKGROUNDS AND NATIONAL CULTURES

Purpose: To examine developmental differences in semantic meaning among young children and adolescents and among subjects from different cultures; to develop methods for assessment of semantic meaning, particularly to apply Piaget's bivalent logic, if possible.
Subjects: 1000 adolescents in various secondary schools in the Zurich, Switzerland area. Later plan subjects 4 to 12 years old in Cambridge, Massachusetts area.
Methods: Two assessment methods: (1) an adaptation of Osgood's semantic differential technique; (2) an original method based on Piaget's two-propositional logic. Subsequent methods will probably be less verbally complex ones.
Findings: The logical method, involving multiple assessments of the semantic connotations of words, is definitely practicable and should yield results which can be contrasted with the semantic differential results for the same subjects and same words. Logical method has some serious limitations which appear to contraindicate its usage in present form for assessing semantic conceptualization as a process. Revision may be attempted.
Duration: January 1963-April 1965.
Investigator(s): Norman F. Watt, Ph.D., Assistant Professor of Clinical Psychology, Harvard University, Cambridge 38, Mass.
Cooperating group(s): Der Schweizerische Nationalfond; The Human Ecology Fund; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Article has been published in a German psychological journal--no reference yet available.

17-W-5 THE MIND-WORLD OF THE CHILD RELATIVE TO THE CONSUMER ROLE

Purpose: To explore the attitudes and knowledge of children about the consumer role.
Subjects: 60 upper-lower or lower-middle class children of normal or higher intelligence, equally divided into three age groups: 5, 7, and 9 years.

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Each age group was composed equally of each sex, and was selected from one school age.
Methods: Procedure was basically clinical. Children were asked questions or given behavior situations in which they were to place themselves. They were encouraged to answer freely and talk as long as they wished. Answers and behavioral responses were compared for age and sex.
Duration: April 1962-January 1964.
Investigator(s): James Utah McNeal (Ph.D. Candidate), Lecturer, Department of Marketing, University of Texas, Austin, Tex.
Publication: Plan to report findings in psychological and marketing journals.

17-W-6 FACTORS RELATED TO THE EATING BEHAVIOR AND SELECTION OF AN ADEQUATE DIET OF GIRLS 12 TO 14 YEARS OF AGE

Purpose: To study physiological, psychological, and sociological factors possibly related to eating behavior and selection of an adequate diet.
Subjects: 140 girls, 12 to 14 years of age, controlled for chronological age, social status, and menarche.
Methods: Information obtained by questionnaire, by food intake records, activity records, certain physiological measurements, taste threshold tests, food enjoyment scales, nutrition knowledge tests, and inventories of values and psychological adjustment.
Findings: The intake of milk and carotene-rich and vitamin C-rich foods was low in relation to current recommendations. Girls did not tend to miss a great number of meals nor did they consume a large amount of snacks. Diets and eating behavior were significantly better during the winter than during the summer. Significant relationships: (1) knowledge of nutrition was favorably related to nutrition practices; (2) when health was considered important in selecting foods, diets tended to be adequate, but when status, sociability, independence, and enjoyment rated high in food selection, poor food practices resulted; (3) overweight and concern about overweight were found concurrent with poor food habits; (4) earlier and later maturation were positively related to poor eating behavior; (5) good family relations and personal adjustments seemed to accompany good eating behavior; (6) social status was positively related to good eating behavior. Sensitivity to the four basic tastes, level of activity, and employment of the mother outside the home were not significantly related to dietary adequacy.
Duration: Completed 1962.
Investigator(s): Maxine Armstrong Hinton, Doctoral Candidate, Iowa State University, Ames, Iowa. (Reported in Journal of Home Economics, March 1963.)

17-W-7 CHILDREN'S FAVORABLE ATTITUDES TOWARD THEIR SOCIO-CULTURAL ENVIRONMENT

Purpose: To gain an understanding of children's socio-cultural orientation as expressed by their concrete interests and attitudes toward their socio-cultural environment. This should aid in helping children direct their interests toward greater growth in mature and rewarding experiences, and should help in planning of school curriculums.
Subjects: 145 boys and 140 girls from sixth grade of two suburban public schools in Cincinnati; 99 percent native born, 70 percent Jewish, 27 percent non-Jewish white, and 3 percent Negro. Average C.A., 11 years 8 months; average M.A., on Otis Group Intelligence Scale, 14 years; socio-economic background on Sim's Score Card, just below "very high".
Methods: Children were asked to list all things and experiences that thrill, delight, and make them happy. Material was tabulated and arranged into separate tests for boys and girls; test was administered to another group of same grade and school during following year.

Findings: Results indicate that children of this age have definite interests and attitudes toward their socio-cultural environment. Boys and girls differ in many of their interests. Tests may also be used with disturbed children to find clues to their problems if they "hate" what most children "like much".
Duration: Not reported-July 1963.
Investigator(s): Rose Zeligs, Ed.D., Certified Psychologist, 14256 Ventura Blvd., Sherman Oaks, Calif.
Publication: Paper will be submitted to psychological or educational journal.

17-W-8 ATTITUDES OF YOUTH TOWARD AGED PERSONS

Purpose: (1) To develop and administer a scale to facilitate the study of attitudes of youth toward the aged. (2) To examine expressed attitudes concerning the aged in relation to certain variables.
Subjects: 400 high school and college students, from predominantly Protestant, intact, middle class, urban families.
Methods: Selected statements (negatively phrased) from the Tuckman-Lorge Old People Questionnaire and parallel positive statements formed the instrument. Chi-square test determined the significance of differences between responses of high- and low-scoring groups. Mann-Whitney U test determined relationship between attitude scores and age of respondent, degree of contact, and family structure. Kruskal-Wallis test determined relationship between attitudes toward the aged and age of parents, rural-urban residence, social class, maternal-child relations, self-concept, and childhood discipline.
Findings: More college women than college men had favorable attitudes toward the aged. High school girls whose homes did not include an aged member were more favorably oriented than were girls who lived with a grandparent. College men from intact families held more favorable attitudes than did men from broken families. Lower social class high school boys and upper middle class college women were more favorably inclined than representatives of other social classes. High school boys expressing satisfaction with self-concepts expressed more favorable attitudes than did those holding negative self-concepts. No significant relationships were observed between the attitudes and age of respondents, place of residence, or strictness of childhood discipline.
Duration: Completed 1962.
Investigator(s): Betty Lane, Doctoral Candidate, Florida State University, Tallahassee, Fla. (Reported in Journal of Home Economics, March 1963.)

17-W-9 SURVEY OF TEENAGE ATTITUDES AND INTERESTS: PART TWO

Purpose: To obtain accurate information with respect to societal and social attitudes of Jewish, non-Jewish, and nonwhite adolescents; to determine whether these attitudes are related to adolescent anxiety and, in the Jewish sample, to determine whether there is any relationship to the degree of Jewish identification.
Subjects: Approximately 313 Jewish adolescent boys and girls, and a minimum of 25 to 50 non-Jewish, nonwhite adolescents who are members of the lower class group.
Methods: Use of specially developed questionnaires which were tested in a pilot study two years ago. It is anticipated that electronic data processing will be employed in final analysis of data.
Duration: September 1962-spring 1965.
Investigator(s): Joel M. Carp, B.A., East Flatbush-Rugby YM-YWHA, Associated YM-YWHA's of Greater New York, 1127 E. 102nd St., Brooklyn, N. Y. 11236.
Publication: A report, several conference papers, and journal articles are planned.

17-W-10 CHOICE AND DIFFERENTIATION OF ADOLESCENTS' VALUES BEFORE AND AFTER ENTERING ADULT SOCIETY: THE PROCESS OF VALUE SOCIALIZATION

Purpose: To discover to what extent boys adopt values prevailing in their homes and how different values and identifications result in personal autonomy versus alienation and deviant behavior.
Methods: Subjects who were interviewed at adolescence reinterviewed after three to five years, in order to follow differentiation of values from adolescence to the adult role.
Duration: 1962-1965.
Investigator(s): Pertti Toukonaa and Yrjo Littunen, School of Social Sciences (Yhteiskunnallinen Korkeakoulu), Kalevantie 4, Tampere, Finland. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Summer 1963).
Cooperating group(s): Research Institute of the School of Social Sciences; Kanslaiskasvatuksen Keskus (Central Organization for Education in Citizenship).

17-W-11 CORRELATES AND EFFECTS OF ETHNIC GROUP IDENTIFICATION

Purpose: To explore possible relationships among such variables as self-concepts, levels of ethnic group esteem, ethnic anxiety, contact with whites, aspirations, and academic achievement of Negro adolescents.
Subjects: 311 Negro adolescents enrolled in three integrated San Francisco Bay area high schools in the same district. Sample contained 148 males and 163 females, all with I.Q. scores above 90 on the Henman-Nelson test.
Methods: Basic questionnaire and a series of 9-item Guttman scales generated for the purposes of this study.
Findings: Favorable self-concepts were found to be related to higher aspirations and greater academic achievement. Ethnic anxiety (concern over one's status as a Negro) was negatively related to self-perceptions and aspirations. Negro adolescents with white friends evidenced high levels of aspiration and higher levels of academic achievement, etc.
Duration: October 1962-July 1963.
Investigator(s): T. Bentley Edwards, Ph.D., Professor of Education and Staten W. Webster, Ph.D., Supervisor of Teacher Education, University of California, Berkeley 4, Calif.
Cooperating group(s): Richmond Union High School District; Computer Center, University of California, Berkeley; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Four articles have been submitted for publication.

17-W-12 EMPLOYMENT OPPORTUNITIES OF NEGRO AND WHITE YOUTH

Purpose: To study earnings and employment opportunities of Negro and white high school graduates.
Subjects: 1,044 1960 graduates of Carver and Mergenthaler vocational high schools, selected for the extreme racial homogeneity of the schools. Mergenthaler has less than two percent nonwhite students and Carver is 100 percent nonwhite.
Methods: Analysis of earnings and employment data obtained from Social Security Administration work history records. Data obtained for all the graduating classes during the last five years at the two schools.
Findings: In the first year following graduation, median weekly earnings are approximately $11 for nonwhite females, $50 for white females, $22 for nonwhite males, and $38 for white males. During the first year, only one in four nonwhite females is regularly employed; only one in two nonwhite males

is regularly employed; and three in four white males and females are regularly employed. Within three months after graduation, white females are employed at a rate of 90 percent, nonwhite females around 40 percent, nonwhite males 72 percent, and white males 87 percent. One year before graduation, 50 percent of the white females are engaged in some paid work, contrasted with 15 percent of the nonwhite females. Among regularly employed workers, the ratio of earnings for nonwhite graduates relative to white graduates does not exceed 70 percent.
Duration: January 1962-November 1965.
Investigator(s): Bernard Levenson, Ph.D., Lecturer and Research Associate, Department of Social Relations, Johns Hopkins University, Baltimore, Md., 21218.
Cooperating group(s): Baltimore City Equal Opportunity Commission; Social Security Administration, U. S. Department of Health, Education, and Welfare.
Publication: Initial interim report; plan to publish some results in late 1964.

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HEALTH SERVICES AND SURVEYS

17-X-1 A PILOT STUDY OF INFANT MORBIDITY AND MORTALITY AMONG ESKIMOS IN THE BETHEL AREA OF ALASKA

Purpose: (1) To determine, with accuracy, infant birth and mortality rates, and to obtain information on incidence of prematurity in a remote Eskimo population; (2) to obtain basic data on the third trimester of pregnancy, birth practices, infant growth and development characteristics and nutritional patterns, and to maintain surveillance of infant morbidity patterns. Data are gathered in order to evaluate what role these conditions may play in the overall high mortality rate (estimated at 145/1000 for Bethel area Eskimos 1956-58).
Subjects: All infants born into the 27 Eskimo villages in the Bethel area over one year period, and mothers of these infants. Total infant population will contain more than 300 individuals. The total population of the 27 villages approaches 6,000 (1960).
Methods: Study is conducted as a longitudinal health survey, involving trimonthly visits of four research nurses to all study villages. During the visits, data are obtained by examination and measurement of study infants, and by interview and examination of mothers. Eskimo aides are located permanently in each village to assist with the investigations. Morbidity data are also acquired from existing records of clinic visits, hospitalization, and radio clinic reports.
Duration: October 1960-December 1962.
Investigator(s): James E. Maynard, M.D., 4304 Adelaide St., Oakland 19, Calif. (Reported in Sources of Morbidity Data, 1962.)
Cooperating group(s): Arctic Health Research Center, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Final publication plans have not yet been formulated; however, a preliminary report (September 1961) is available from the Epidemiology Section, Arctic Health Research Center.

17-X-2 PRESCHOOL SCREENING PROJECT

Purpose: To detect amblyopia ex anopsia, hearing loss, dental caries, and behavioral problems among children screened, and to refer these children for dental and/or medical attention. To inform and educate parents of children screened at the clinic as to the importance of good health practices in maintaining the health of their children.
Subjects: Four year old children.
Methods: Interviewing and testing.
Investigator(s): Dwight M. Bissell, M.D., City Health Officer, 151 West Mission St., San Jose, Calif; R. C. Miller, M.D., Assistant City Health Officer and John Hayakawa, Chief Public Health Educator, San Jose Health Department, San Jose, Calif. (Reported in Sources of Morbidity Data, 1962.)
Cooperating group(s): San Jose Health Department.

17-X-3 AN AUDIO-VISUAL TEST FOR EVALUATING ABILITY TO RECOGNIZE PHONETIC ERRORS

Purpose: To prepare an audio-visual test to ascertain reliability of speech clinicians and researchers in recognizing phonetic errors in children's speech.

Subjects: Three groups as evaluators of films: (1) 50 experienced speech clinicians; (2) 50 seniors majoring in speech and hearing; and (3) 50 classroom teachers.
Methods: Subjects given test for Film A under audio-visual and audio-only conditions. For Film B, only audio-visual condition used. Test scores determined in relation to "correct" agreements with an empirical answer sheet. Scores compared for following conditions: isolation, phrases, and trios; and audio-visual vs. audio-only for Film A.
Duration: January 1963-June 1964.
Investigator(s): Ruth Beckey Irwin, Ph.D., Professor of Speech, Ohio State University, Columbus 12, Ohio.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Cooperative Research Branch, Office of Education; journal article anticipated.

17-X-4 IMMUNIZATION STUDY OF NORTH CAROLINA FIRST GRADE SCHOOL CHILDREN

Purpose: To determine efficiency of existing immunization programs on the basis of school records; to evaluate adequacy of school records system regarding immunization; to evaluate effectiveness of existing laws and regulations regarding immunization and school records of immunization.
Subjects: North Carolina first grade school children.
Methods: Local health department nurse delivers forms to first grade teachers, instructs teachers as to proper completion of forms, returns at later date to collect forms, and returns them by mail to State Board of Health.
Duration: September 1961-May 1962.
Investigator(s): Theodore Scurletis, M.D., Pediatric Consultant, and Harold Sauls, Biostatistician, North Carolina State Board of Health, Raleigh, N. C. (Reported in Sources of Morbidity Data, 1962.)
Cooperating group(s): North Carolina State Board of Health.

17-X-5 MENTAL HEALTH OF A GROUP OF SCHOOL CHILDREN IN STIRLING COUNTY

Purpose: To assess mental health of children in community where mental health of adults has been studied. To compare some of these children with their parent(s) who were in the adult study.
Subjects: All children in a consolidated school, grades 3 to 12.
Methods: California Test of Personality; modification of health questions used for adults; teacher interviews.
Duration: 1955-1964.
Investigator(s): Dorothea C. Leighton, M.D., Senior Research Associate, and Laurel Hodgden, Ph.D., Research Associate, Cornell Program in Social Psychiatry, Cornell University, Ithaca, N. Y.; and Janice Ross, Ph.D., Associate Professor of Psychology, University of Saskatchewan, Sask.
Cooperating group(s): Association for the Aid of Crippled Children.
Publication: Will probably be reported as a paper.

17-X-6 EARLY DETECTION OF POTENTIAL REFERRALS FOR PSYCHOLOGICAL SERVICES

Purpose: To develop a battery of screening devices to adequately identify future referrals of students with psychological problems.
Subjects: Kindergarten pupils having entered school in fall of a given school year. Initial pilot study comprised 33 pupils; full-scale investiga-

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tion will include approximately 150 pupils.
Methods: Screening battery consisting of clinical interview, Bender Visual Motor Gestalt, Draw-a-Person, dominance tests (eye-hand-foot coordination), summary sheet of significant information, teacher opinion (ranking), and Wide Range Achievement Test (reading grade only). Annual follow-up studies are planned.
Duration: September 1963-spring 1965.
Investigator(s): Rudolph F. Wagner (Ph.D. Candidate), Chief Psychologist, Richmond Public Schools, 809 E. Marshall St., Richmond 19, Va.
Publication: Results of pilot study will be available in mimeographed form by summer 1964; full report is planned.

17-X-7 KING CITY FAMILY HEALTH STUDY

Purpose: To measure variables related, or thought to be related, to the development of atherosclerotic heart disease in all members of selected families, and to compare the inter- and intra-familial aggregation of these factors in the first group selected from the King City Union High School district. In the second group, purpose was to ascertain clinical cases of atherosclerotic heart disease, using the Southern Monterey Medical Clinic facilities.
Subjects: Group 1: all families residing in King City Union High School district who have a child enrolled in high school during course of the study. Group 2: all persons residing in Southern Monterey County Hospital service area.
Methods: Interview, examination, and existing records used for both groups.
Investigator(s): L. Hughes Andrus, M.D., and David C. Miller, M.D., Southern Monterey County Medical Clinic; Reuel A. Stallones, M.D., Associate Professor of Public Health, School of Public Health, University of California, Los Angeles 24, Calif. (Reported in Sources of Morbidity Data, 1962.)

17-X-8 INFLUENCE OF AIR POLLUTION ON HEALTH AND PATTERNS OF RESPIRATORY ILLNESS IN CHILDREN AND STUDENT NURSES

Subjects: Elementary school children in several Los Angeles schools and student nurses in three hospitals.
Methods: Interview and daily questionnaires regarding symptomatology in the nurses, and from the schools by special records completed by the nurse.
Duration: July 1961-1965.
Investigator(s): Paul F. Wehrle, M.D., Professor of Pediatrics, and Bernard Portnoy, M.D., Assistant Professor of Pediatrics, School of Medicine, University of Southern California, Los Angeles, Calif. (Reported in Sources of Morbidity Data, 1962.)

17-X-9 RELATIVE ROLES OF THE PUBLIC HEALTH NURSE AND THE PHYSICIAN IN PRENATAL AND INFANT SUPERVISION

Purpose: To establish what part of the physician role in prenatal and well-baby care can be provided by a public health nurse working in a group practice setting in association with physicians, and whether this is acceptable to those involved. To determine difficulties and obstacles encountered in such a program, and to determine variation in utilization of professional services.
Subjects: Pregnant women who are members of the Montefiore Medical Group,

and the children they bear.
Methods: Random samples with a control group, observed and cared for by public health nurse in prenatal and well-baby services of Montefiore Medical Group.
Duration: July 1963-June 1967.
Investigator(s): George A. Silver, M.D., Chief, Division of Social Medicine, Montefiore Hospital, Gun Hill Rd., New York 67, N. Y.
Cooperating group(s): Health Research Council; Montefiore Medical Group.

17-X-10 A STUDY OF A CASE OF PSEUDO-DEFICIENCY

Purpose: To determine the long-range effect of an improper diagnosis and subsequent treatment of a child believed to have had phenylketonuria.
Subjects: A young child who was incorrectly diagnosed and treated for PKU for three years.
Methods: Case study of effects of a therapy program designed to overcome ill effects on child's physical, emotional and mental development.
Duration: 1961-1965.
Investigator(s): Bettie Arthur, Ph.D., Instructor in Psychiatry, School of Medicine, University of Michigan, Ann Arbor, Mich.
Publication: Publication is planned.

17-X-11 A MENTAL HEALTH CENTER FOR DISTURBED BLIND CHILDREN

Purpose: To translate knowledge of the psychology of blind and severely visually impaired children and the psychopathology of their disturbed states into usable diagnostic, therapeutic, educational, and casework methods.
Subjects: Emotionally disturbed, retarded, brain-damaged, and multiply handicapped blind children to age 21 and their families from all parts of the United States.
Methods: Diagnostic test construction; standardized and free associative interviews; analysis of psychotherapy sessions; experimental teaching techniques; motion picture studies of disturbed behavior, learning, interpersonal relations, motility and mannerisms, multiple disabilities; demonstration clinics.
Duration: October 1962-September 1965.
Investigator(s): Walter Kass, Ph.D., Director, Mental Health Center for Disturbed Blind Children, Jewish Guild for the Blind, 1880 Broadway, and Associate Professor; Arthur E. Gillman, M.D., Assistant Professor, Albert Einstein College of Medicine, Yeshiva University, New York, N. Y.
Cooperating group(s): Bureau for Education of the Visually Handicapped, New York City Board of Education; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Findings to be presented at professional meetings and to be published.

17-X-12 WAITING LIST DROPOUTS IN A CHILD GUIDANCE CLINIC

Purpose: An exploratory analysis of differences between "dropouts" and "continuers" on the clinic waiting list which alone, or in combination with factors in agency processes, contribute to initial acceptance and later refusal of service.
Subjects: 100 consecutive cases drawn from agency files which had accepted or refused service when it was offered.

Methods: All cases were tabulated for 14 factors. Families who refused treatment were contacted for personal interviews and a schedule was completed where contact was made. Of the 55 families who refused treatment, 43 were seen personally and 4 completed the schedule by mail. Results were evaluated and tentative findings written for agency use.
Findings: Due to small number of cases, only highlights were found. Families waiting 6 to 12 months tended to accept treatment, as did parents of 11 to 16 year olds, and parents of youngest children. Also, families in higher or lowest socio-economic categories and those having only one parent in the home tended to be more accepting of treatment. Refusals were more apt to come from school referrals and from parents of children with retardation or psychosomatic difficulties. In a large number of cases, parents did not understand function of the clinic, its procedures or methods. Communication seemed a problem in many refusals. An expanded study of 300 cases will cover period June 1963-June 1966.
Duration: March-July 1962.
Investigator(s): Robert S. Adams, M.D., Psychiatrist-Director, Bernice G. Sherlock, M.S.W., ACSW, Chief Psychiatric Social Worker, Mary Elizabeth Sterling, M.A., ACSW, Psychiatric Social Worker, and Howard M. Weinick, Ph.D., Chief Psychologist, Child Guidance Clinic of Waterbury, Inc., 52 Pine St., Waterbury 10, Conn.
Cooperating group(s): Connecticut Department of Mental Health; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Planned in professional journal.

17-X-13 A STUDY OF DENTAL HEALTH RELATED TO SOCIO-ECONOMIC LEVEL

Subjects: Three groups of children, ages 6 to 12 years, equally divided into high, middle, and low socio-economic groups (N=801). Also included are two groups of 250 children each in adequate fluoride and low/nonfluoride towns.
Methods: Children are given oral examinations by a pedodontist and an orthodontist; statistical analysis of results.
Duration: March 1960-November 1962.
Investigator(s): C. R. Castaldi, D.D.S., Professor of Pedodontics, William A. Quigley, D.D.S., Professor of Orthodontics, University of Alberta; and W. Zacherl, D.D.S., D.D.P.H., Dental Health Officer, City of Edmonton, Alta.
Publication: Journal of Dental Research, July-August 1961; publication planned in Canadian Journal of Public Health. (Reported in Sources of Morbidity Data, 1962.)

17-X-14 EFFECT OF FLUORIDE TABLET ADMINISTRATION

Purpose: To test effectiveness of fluoride tablet administration to children in two communities with no public water supply.
Subjects: Children of grade school age and preschool age in the two communities, whose parents desired to cooperate.
Methods: Tablets administered during school year in conjunction with school lunch program. Parents were responsible for giving tablets to preschool children, and school age children during school holidays. Baseline examination including bite-wing X-rays provided the control. Children re-examined semi-annually.
Findings: An average Def rate of 2.8 for 29 children under 8 years of age and an average DMF rate of 3.9 ranging from 3.0, at age 8 to 6.3 at age 14, among 44 children aged 8 to 14. Family histories showed several had originated from fluoridated areas. Filling needs met averages of 36 percent for permanent teeth and 8 percent for deciduous.

Duration: January 1963-1966.
Investigator(s): Michael Arra, D.D.S., Director of Dental Health, and C. W. Lemke, M.S., Statistician, Wisconsin State Board of Health, Madison, Wis.
Publication: Information regarding progress available upon request to principal investigator.

SOCIAL SERVICES

17-Y-1 LOCAL AREA STUDY AND DEMONSTRATION PROJECT

Purpose: To design and test a method of combined study of the needs of children and youth, including health, welfare, education, mental health, delinquency, employment, and leisure time; to design a practical program of services to meet them.
Subjects: Two local areas in the Commonwealth of Massachusetts, each containing 30,000 to 35,000 children.
Methods: Service and area unit profiles, interviews with population samples, case analyses, statistical analysis.
Duration: February 1962-1967.
Investigator(s): John E. Jacobi, Ph.D., Project Director, Massachusetts Committee on Children and Youth, 9 Newbury St., Boston 16, Mass.
Cooperating group(s): Statewide and local voluntary agencies; State and local departments and units of government; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-2 CHILD WELFARE SERVICES RESEARCH: UNMARRIED MOTHERS WHO KEPT THEIR BABIES

Purpose: (1) To increase knowledge about unmarried mothers who, after initial consideration of relinquishment, decided to keep their babies; (2) to assess the care of the child and situation of the mother approximately three years after birth of child; and (3) to determine conditions and situations under which mothers have given good care to the children and have satisfactory lives of their own.
Subjects: 290 unmarried mothers who in 1959 and 1960 asked help of the Children's Home Society and the Los Angeles County Bureau of Adoptions in providing adoption for their children, received casework services, and then decided to keep their child. Follow-up of these mothers and children in 1963 appears likely to yield information on two-thirds of the cases.
Methods: Case record reading of 290 cases of mothers who kept their infants, casefinding of the mothers, interviewing those mothers who were found and were willing to be interviewed, questionnaires to those living out of state; second-hand information from relatives and agencies. Follow-up study is related to a doctoral thesis at the School of Social Work, University of Southern California, on a comparative record study of 100 mothers who decided to relinquish their children for adoption and 100 who decided to keep them. These latter 100 cases are included in the population.
Duration: April 1962-December 31, 1963.
Investigator(s): Elisabeth R. Frank, Ph.D., Research Director, and Helen R. Wright, Ph.D., Social Research Consultant, Children's Home Society of California, 3100 W. Adams Blvd., Los Angeles, Calif.
Cooperating group(s): Children's Home Society of California; Los Angeles County Bureau of Adoptions; California State Department of Social Welfare.
Publication: Data and results will be published in 1964.

17-Y-3 COMMUNITY SERVICES FOR THE UNWED PREGNANT ADOLESCENT

Purpose: To provide a comprehensive community program, including educational, medical, and mental health services for unwed pregnant adolescents remaining

at home during pregnancy.
Subjects: Selected number of girls in elementary school, aged 11 to 15 years, who have not reached the seventh month of pregnancy at point of project admission.
Methods: Initial psychological, psychiatric, and social casework evaluations of each participant. Ongoing evaluations, including teacher's assessment of academic achievement. Follow-up studies to evaluate participant's adjustment after leaving project. Constant ongoing evaluations by staff of techniques used in services offered to determine which are most effective. Detailed records kept of all aspects of the service program.
Duration: February 1963-January 1966.
Investigator(s): Harold M. Visotsky, M.D., Director, Illinois State Department of Mental Health, 54 W. Hubbard St., Chicago, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Final report to National Institute of Mental Health; other plans uncertain.

17-Y-4 THE UNMARRIED FATHER: DEMONSTRATION AND EVALUATION OF AN ASSERTIVE CASEWORK APPROACH

Purpose: To ascertain the validity of including putative fathers in a structured casework service. Specifically, to determine: (1) availability of putative father for casework interviews; (2) effect of proposed casework relationship on unwed girl; (3) extent of financial contribution by putative father; (4) effect of putative father involvement on child's future; and (5) profile of putative father.
Methods: Cases in which putative father participated in casework program compared and contrasted with those in which the unmarried father was not reached. Standardized case recording, psychological testing, and attitude measures employed to evaluate program.
Duration: June 1963-May 1966.
Investigator(s): Reuben Pannor, M.S., District Director, Vista Del Mar Child Care Service, 3200 Motor Ave.; Fred Massarik, Ph.D., Director, and Eugene Bender, Research Associate, Research Service Bureau, 590 N. Vermont, Los Angeles, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-5 COMMUNITY SHELTER CARE PROJECT

Purpose: To identify children needing emergency shelter care; to study characteristics of these children and their families; to facilitate planning and recommend more systematic arrangements for emergency care; to suggest procedures to reduce number of children requiring emergency care.
Subjects: Children referred for emergency shelter to various voluntary and public agencies in greater Boston.
Methods: (1) Services: Community Shelter Care Project to serve as central agency through which referrals for and data about emergency placement will be channelled. Three local agencies will provide immediate receiving facilities for children referred to them by the Project. Ongoing planning to be carried out by receiving agency in cooperation with other community agencies when indicated. Report on progress and disposition from receiving agency to Project. (2) Study method: development of referral and admission forms, and schedules, tailored to the agency. Pretesting of forms and procedures on limited number of hospital social service cases and through discussion with workers from other potential sources of referral and receiving agencies.

Visits to selected communities which have a shelter facility or systematic programs for emergency shelter care.
Duration: January 1964-January 1966.
Investigator(s): Rose Bernstein, M.S., M.S.S., Director, Community Shelter Care Project, 161 S. Huntington Ave., Boston, Mass. 02130.
Cooperating group(s): Eleven public and voluntary child placement agencies; Permanent Charities Fund.

17-Y-6 SOCIAL AND ECONOMIC FACTORS INVOLVED IN EMERGENCY PLACEMENT OF DEPENDENT CHILDREN IN THE DISTRICT OF COLUMBIA JUNIOR VILLAGE

Purpose: To investigate social and economic factors of the families of the destitute, homeless, and inadequately parented children receiving temporary shelter care in D. C. Junior Village in calendar year 1962. It is hoped that material collected will be useful in community planning and in furthering the rehabilitation of the individual families involved through cooperative planning with appropriate community social agencies.
Methods: Areas such as employment, earning capacity, education, housing, health, and family stability will be explored, analyzed, and appraised to determine what supportive services the community had or might have offered to these marginally stable families to have obviated or minimized the necessity of emergency shelter care. Small group of caseworkers, functioning as case analysts after a period of intensive orientation, will attempt to locate and interview all significant members of the families, randomly sampled from those whose children were admitted to D. C. Village, but where juvenile court action in regard to parental custody was not deemed necessary. A special case record instrument is being designed.
Duration: April 1963-June 1964.
Investigator(s): Kathleen M. Jackson, M.A., Assistant Professor, Howard University School of Social Work, Washington 1, D. C.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-7 PRELIMINARY STUDY OF 24 HOUR PROTECTIVE SERVICES AND SHELTER CARE

Purpose: Complaints of alleged child neglect and/or cruelty and abuse usually come to police attention in communities without social services available on a 24 hour basis. This has resulted in (1) young children being removed from their homes when immediate social services could have avoided their removal; (2) children left in unsatisfactory or dangerous home situations due to lack of shelter care facilities and/or inevitable delay court action; and (3) many cases unnecessarily referred to court without initial efforts to effect satisfactory adjustment without court action. This project will attempt to locate communities which have 24 hour casework service and explore their experience with regard to initial procedures, shelter care, and court referral practice.
Duration: September 1962-August 1963.
Investigator(s): Sherwood Norman, Director of Detention Services, National Council on Crime and Delinquency, 44 E. 23rd St., New York 10, N. Y. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1963.)

17-Y-8 CHILD WELFARE PROJECT

Purpose: (1) To study social and psychological problems of children in public care, whether in homes or hospital; (2) to study children's institutions and their functioning.
Subjects: Mentally subnormal children at home and in hospital; normal children in institutions and foster homes.
Methods: Observation, standardized interviews, questionnaires, and tests.
Duration: January 1963-1968.
Investigator(s): Jack Tizard, Ph.D., Medical Research Council, 49 Wellington St., London, W. C. 2, England.
Cooperating group(s): Association for the Aid of Crippled Children.
Publication: Papers to be published as results accrue.

17-Y-9 STUDY OF THE MENTAL HEALTH NEEDS AND PREVENTIVE INTERVENTION POTENTIALS OF PUBLIC CHILD DAY CARE CENTERS

Purpose: To explore the mental health needs of children and families using public child day care centers in Berkeley, California; to strengthen the service at point of entry and develop and test screening and predictive instruments to spot emotionally disturbed children, who can later be followed in the public school system.
Subjects: Population drawn from approximately 300 children in six day care centers and their families.
Methods: Direct observation at the centers, discussion and consultation with staff, collaboration with mental health consultants, and some direct work with families in their homes. Preliminary study should lead to a specific demonstration-research project in preventive intervention.
Duration: Not reported-June 1964.
Investigator(s): Lydia Rapoport, M.S.S., Lecturer in Social Welfare, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-Y-10 MAGNITUDE AND SCOPE OF FAMILY DAY CARE PROBLEM IN NEW YORK CITY

Purpose: To provide quantitative and descriptive data on the problem of unsupervised family day care arrangements in New York City. To determine suitability of care that is being given in family day care homes and to study characteristics of families using the care.
Methods: 1960 census tract data is employed to obtain stratified cluster sample survey to identify families using and providing family day care; concentrated effort is made in areas where it is likely that family day care is most prevalent. Demographic, social, and economic description is made of families involved, and homes are evaluated in reference to standards of adequate day care. Assessment is made of outstanding social characteristics and needs of families receiving care.
Duration: April 1963-March 1966.
Investigator(s): Elizabeth A. Vernon, Chief, Division of Day Care, Day Camps and Institutions, and Sylvia F. Hunter, Research Assistant, New York City Health Department, 100 Centre St., New York 13, N. Y.
Cooperating group(s): Medical and Health Research Association; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-11 COST ANALYSIS OF DAY CARE CENTERS

Methods: Survey of approximately six day care centers in the Boston area. Information concerning organizational structure, programs, volume of service and costs, and characteristics of clients served, used as basis for comparative analysis of costs as related to variations in all above categories. Detailed time study conducted in one agency to obtain more precise data on elements of cost.
Duration: 1964-not reported.
Investigator(s): Arnold Gurin, M.S., Associate Professor of Social Administration, and Doris S. Fraser, M.S.S.S., Research Associate, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham 54, Mass.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Final report will include an exposition of methods of cost analysis in day care centers which can be used as a guide for agencies desiring to make similar analyses.

17-Y-12 FACTORS AFFECTING THE OUTCOME OF LONG-TERM FOSTER CARE

Purpose: To assist child care agencies in improving their management of long-term foster care children by deriving early indicators of subsequent adult outcome and evaluating the significance of these indicators.
Subjects: (1) Foster children under agency care for more than five years who were not mentally retarded, were not adopted, and did not terminate with agency before age 11; (2) foster homes in which these children stayed for longest and most recent period; and (3) current foster children, more than two years in care.
Methods: Analysis of early placement and preplacement histories in light of assessed adult outcome. Clinical investigation of children currently in foster care and foster parents assessed to be representative of certain categories derived from histories.
Findings: Original sample could be divided into "high-risk" and "low-risk" groups by means of certain simple indicators referring to situation at time of placement. Other indicators, referring to foster homes, offer means of identifying those situations most beneficial and most dangerous to children from the "high-risk" group.
Duration: 1962-1965.
Investigator(s): H. B. M. Murphy, M.D., Ph.D., Associate Professor of Psychiatry, McGill University, Montreal, Que.
Cooperating group(s): Children's Service Center; Grant Foundation.
Publication: Partial findings to appear in Mental Hygiene during 1964. Other papers will follow.

17-Y-13 FOSTER PARENT MOTIVATION AND EFFECTIVENESS

Purpose: To investigate the patterns of motivation associated with foster parenting, and to attempt to relate these to foster parent effectiveness as determined by the short-term (six months) outcome of foster child placement.
Subjects: A group of recently licensed foster parents.
Methods: Information regarding foster parent motivation will be obtained by analyzing the contents of semistructured interviews with the group of foster parents under study, searching for individual motivational themes and for recurring patterns of themes. Foster parent effectiveness will be determined six months after placement by the completion of separate mailforms by the agency worker and the school teacher. Foster parents will then be ordered

into six different groups based on an analysis of the mailforms. Attempts will be made to relate patterns of foster parent motivation and individual motivation themes to foster parent effectiveness.
Investigator(s): Joel Saldinger, M.D., Department of Psychiatry, Mount Zion Medical Center, 2255 Post, San Francisco, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-14 WHAT HAPPENS TO FAMILIES IN THE YEAR BEFORE INITIAL FOSTER CARE PLACEMENT

Purpose: To study economic, social, and health aspects of the familial situation experienced by the newly placed foster child in the 12 months prior to placement, in order to identify areas in which social, health and other community services could have been helpful in maintaining family life, thereby reducing number of children requiring foster care.
Subjects: Approximately 400 families of children who are experiencing their first social agency foster care placement. Cases will be identified through intake records of the Bureau of Child Welfare, New York City Department of Welfare, and will represent entire population of those youngsters who meet study criteria during a two to three month intake period.
Methods: Data will be gathered through extensive retrospective research interviews with parent or parents (or other guardian) who cared for the child during 12 months prior to placement. Following identification of study population from the Department of Welfare intake records, home interviews will be made by trained social workers. Interview will focus on the following seven content areas: economic situation, housing, family situation, health, agency contacts, school experience, child care. Interview will begin with an exploration of family's situation 12 months prior to placement in these content areas, and will then trace changes in situation during the year, what family did about the change, why, and with what results. This will include exploration of family's personal resources, when and to what extent they were used, family's knowledge and use of community services, and why these services were not used sooner, or at all. Effort will be made both to identify critical incident or situation giving rise to decision for placement, as well as to describe relevant long term chronic factors. Selected data will be validated through reading of agency case records on a 10 percent sample of study population.
Duration: January 1963-July 1964.
Investigator(s): Mignon Sauber, M.A., Director, and Shirley Jenkins, Ph.D., Research Department, Community Council of Greater New York, 225 Park Ave. South, New York, N. Y. 10003.
Cooperating group(s): New York City Department of Welfare; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Study will be published by Community Council of Greater New York.

17-Y-15 PSYCHIATRIC CARE THROUGH SPECIAL FOSTER HOMES

Purpose: To develop a treatment program for emotionally disturbed children combining a brief period of residential care during study and diagnosis, and specialized foster home care as part of the treatment plan.
Subjects: School aged boys and girls selected on basis of behavioral criteria.
Methods: Training program for foster parents, including group meetings, seminars, and individual supervision held at Merrifield House of the Children's Friend Society. Children in residence at Merrifield meet foster parents and initial contacts begin. Following foster home placement, therapeutic activities and any remedial education for the child continue; foster parents training program also continues with additional individual supervision and foster home contacts. Evaluation will be concerned with validity of established criteria

for selection of foster parents, parent participation in training program, and relationships with the child. Progress of children will be evaluated on basis of social and psychological functioning at intake compared with their functioning during treatment and placement program.
Duration: 1961-March 1966.
Investigator(s): Jean B. Griesheimer, M.S.S.W., Executive Director, Isabel C. Wooten, Caseworker, Worcester Children's Friend Society, 2 State St., and Joseph Weinreb, M.D., Executive Director, Worcester Youth Guidance Center, Worcester, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

17-Y-16 PROJECT FOR THE ESTABLISHMENT OF THERAPEUTIC FOSTER HOMES FOR EMOTIONALLY DISTURBED CHILDREN

Purpose: To demonstrate that emotionally disturbed children who need to be in a family home can have their needs met in a therapeutic foster home. Foster homes will be selected to carry out a professionally prescribed treatment program for a particular child. In addition to the demonstration aspect of the project, instruments of measurement will be developed to evaluate the outcome.
Subjects: Approximately 20 emotionally disturbed children, under 16 years of age, and the same number of foster parents.
Methods: Design of research instruments as indicated.
Duration: August 1963-July 1966.
Investigator(s): I. W. Fellner, M.S.W., Catherine R. Clement, M.S.W., and Lawrence de Fato, M.S.W., San Mateo County Department of Public Health and Welfare, San Mateo, Calif.
Cooperating group(s): California State Department of Social Welfare.
Publication: Eventual publication is planned.

17-Y-17 DELINQUENT YOUTH IN FOSTER FAMILIES OR IN INSTITUTIONS

Purpose: Hypotheses: (1) foster families could be more effective in handling juvenile delinquents than institutions, and (2) effectiveness depends on the child's age at commitment to the foster family.
Subjects: 18 delinquent boys sent to foster families, and 18 delinquent boys of the same age sent to an educational institution.
Methods: Subjects given medical examination and clinical interviews; social worker visits all families of all subjects, and the foster families.
Duration: June 1961-December 1963.
Investigator(s): Dr. Bronislav Skaberne, Katja Vodopivec, Marijan Blejec, Vinko Skalar, and Milos Kobal, Institut za Kriminologijo pri Pravni fakulteti v Ljubljani, Trg revolucije st. 11, Jugoslavija. (Reported by NCCD.)
Cooperating group(s): Council for Social Welfare of the People's Republic of Slovenia; Boris Kidric Research Fund.

17-Y-18 ANALYZING THE DECLINE IN APPLICATIONS FOR ADOPTION

Purpose: To identify factors relating to decline in applications for adoption.
Methods: Mail survey of all agencies offering adoption services in the United States. Key informants are asked to report local community conditions which seem to be affecting number of adoption applicants. Description of

changes in agency requirements that may have been effected to meet the decline in applications. Major study of social and psychological variables affecting the flow of applications to adoption agencies may follow.
Duration: November 1962-not reported.
Investigator(s): Lydia F. Hylton, M.S.W., Research Associate, and David Fanshel, D.S.W., Director of Research, Child Welfare League of America, 44 E. 23rd St., New York 10, N. Y.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

17-Y-19 CONSEQUENCES OF A STATE SUITABLE HOME LAW FOR ADC FAMILIES IN FLORIDA

Purpose: To focus on consequences of Florida's Suitable Home Law for families in which mothers either withdrew application for assistance or withdrew from assistance as a direct result of the law.
Subjects: Approximately 1800 former payees of ADC grants (large majority Negro mothers) who withdrew from ADC program between June 1959 and June 1961, plus control group of approximately 850 payees who have remained on ADC rolls.
Methods: Statewide sample of subjects, stratified by seven geographic areas drawn from closed files (experimental group) and open files (control group) of Florida State Department of Public Welfare. Interviews in spring of 1964 and reinterviews approximately one year later. Data also extracted from case files of Florida State Department of Public Welfare.
Duration: November 1963-October 1965.
Investigator(s): Lewis M. Killian, Ph.D., Associate Director, Roland J. Chilton, Ph.D., Research Associate, Charles M. Grigg, Ph.D., Director, Institute for Social Research, and Meyer Nimkoff, Ph.D., Head, Sociology Department, Florida State University, Tallahassee, Fla.
Cooperating group(s): Florida State Department of Public Welfare; Social Security Administration, U. S. Department of Health, Education, and Welfare.

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RESEARCH NOTES

NEW EDUCATION REFERENCES ANNOUNCED BY PHI DELTA KAPPA

Phi Delta Kappa will soon begin the biennial publication of a National Register of Educational Research Personnel. The first issue is currently being prepared at the Ohio State University and is expected to be completed by fall 1964. Later plans include a compilation of research projects in education to be entitled Education Abstracts and scheduled for fall 1966.

DATA PROCESSING SYSTEMS COMPLETED IN CLEARINGHOUSE

The Children's Bureau Clearinghouse for Research in Child Life recently completed its conversion of mailing lists to computer operation. A new system of preparing copy for publication has also been installed. This is the first issue of Research Relating to Children produced under the new process. It is hoped that the new equipment and techniques will permit the Clearinghouse to extend its coverage of research in "under-represented" fields, and to increase its services to research personnel through wider distribution of publications and closer communication with contributors.

COMING - REGIONAL RESEARCH CENTERS IN CHILD HEALTH AND HUMAN DEVELOPMENT

An Information Centers Program has recently been established at the National Institute of Child Health and Human Development of the U. S. Public Health Service. Dr. Charles Bernier, Head of the new program, emphasized the focus on health rather than on disease forms usually studied in the other Institutes. When fully operational, the new program will consist of a series of regional research and information centers, each focusing on a specific aspect of health and development. The first center is to be located in Baltimore and will be concerned with the aging process (age 21 and above).

OFFICE OF EDUCATION TO ADMINISTER NEW PROGRAM FOR HANDICAPPED

The U. S. Office of Education has established a new Division to administer the teaching and research program established under Title III of Public Law 88-164. The Law provides for a program of grants-in-aid for the training of personnel needed to educate handicapped children (defined as "mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children who by reason thereof require special education") and for a program of research and demonstration projects in this area. The sum of $53 million is authorized over a three-year period for this purpose. Dr. Samuel A. Kirk, former Professor of Psychology and Special Education at the University of Illinois and Director of the Institute for Research on Exceptional Children, has been appointed to head the new Division.

NEW PERINATAL RESEARCH CENTER IN CLEVELAND

A clinical research center to study problems of pregnancy, birth, and infancy will be established as the result of a U. S. Public Health Service grant to the School of Medicine, Western Reserve University, Cleveland, Ohio. In the unique 12-bed center, obstetricians and pediatricians will take a new approach to the investigation of perinatal problems. Each patient will be closely followed during both the prenatal and the postnatal periods. Initial research will focus upon problems relating to fetal anoxia, metabolic and endocrinologic conditions during pregnancy, and other conditions possibly related to infant mortality and disease. The Center is to be located in the Cleveland Metropolitan General Hospital, and will be co-directed by Dr. Robert S. Schwartz, Associate Professor of Pediatrics and Dr. Edward J. Quilligan, Professor of Obstetrics and Gynecology.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. (Gives synopses of U. S. doctoral dissertations with an annual index.)
dsh abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington 2, D. C.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y.
Inventory of Social and Economic Research in Health, Health Information Foundation, 420 Lexington Ave., New York 17, N. Y.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York 17, N. Y.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington 6, D. C.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York 3, N. Y.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York 24, N. Y.
Sources of Morbidity Data, Clearinghouse on Current Morbidity Statistics Projects, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

The Excerpta Medica Foundation, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y., has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, Excerpta Medica can provide to subscribers, at cost, photocopies and translations of complete articles.

Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 888 categories of human behavior. Complete sets of all files are available in 16 member universities in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn.

Science Information Exchange, Smithsonian Institution, 313 Universal Bldg., Connecticut and Florida Aves., N. W., Washington 6, D. C., provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name ____

Address ____

____

Name ____

Address ____

____

Name ____

Address ____

____

Name ____

Address ____

____

Signed ______________________

____

____

ACCORDING TO THE CRITERIA ESTABLISHED BY THE CLEARINGHOUSE, THE FOLLOWING TYPES OF STUDIES ARE NOT ELIGIBLE FOR INCLUSION IN RESEARCH RELATING TO CHILDREN

Studies already reported to the Clearinghouse

Studies already published or which will be published before the next issue of Research Relating to Children

Studies completed more than two years ago

Masters' theses, unless they represent work beyond a doctorate, as in dentistry

Annual or biennial reports or other regularly collected information

Handbooks, manuals, directories, textbooks, etc.

Historical or descriptive studies; studies based on secondary sources; bibliographical materials

Studies of test development, standardization, or validation, except tests for special groups of children such as blind or retarded

Studies of local or temporary significance; those of interest primarily to the agency involved

Studies of services or programs not primarily related to children

Studies of general population in which children comprise only an incidental part

Demonstration projects where no formal plan for evaluation is described

Studies of college students or adults where the focus is not on their childhood; studies of parents where the emphasis is not on their children

Educational studies of curriculum construction or materials; teaching methods; general school personnel studies where children are not directly affected; survey of school facilities or needs; general school administration studies

Studies of the training, personality, or aptitude of personnel without measurement of the effects on children

Medical, dental, or nutrition studies limited to: morphology or physiology; the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions; surgery, chemotherapy, antibiotics or physical therapy, etc. (According to 1956 revision of criteria for inclusion.)

Biochemical or other laboratory studies

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Welfare Administration
Children's Bureau

Clearinghouse for Research in Child Life

NOTICE OF RESEARCH PROJECT

for inclusion in
Research Relating to Children,
the Children's Bureau
inventory of current
research projects

For purposes of this inventory, "children" are defined as persons under 18 years of age, or college students if their childhood is of primary concern.

PLEASE REPORT STUDIES IN PROGRESS ON CHILDREN	growth and development • intelligence • personality and emotional disorders • educational process • health and social services for children
PLEASE DO NOT REPORT STUDIES	already reported, published, or soon to be published • completed more than two years ago • on purely medical subjects • on curriculum development or teaching methods • on personnel training • on test development (except for special groups of children such as blind or mentally retarded) • of local or temporary significance • demonstration projects unless there is a formal plan for evaluation • masters' theses, unless they represent work beyond a doctorate, as in dentistry

---

If you or your colleagues are currently doing research on children, please supply the information requested on the reverse side.

If you are not doing research on children now, do you expect to do any in the next two years?
yes _____ no _____ do not know _____

Does this information represent a reply for -- an individual only _____
an organization or department as a whole _____

If you know of other investigators of whose research the Clearinghouse should be informed, please give name(s) and address(es) below:

Information supplied by

name ____________________

position ____________________

organization and address ____________________

if person who received form is not filling it out, please indicate why ____________________

Form CB - 200 - C

Budget Bureau No. 72 - R396.9

PLEASE TYPE OR PRINT

Title of project:

Purpose:

Subjects:

Methods:

Findings:

Publication references and/or plans. (If no publication is planned, please indicate under what conditions data and results will be available.)

Date project initiated: Estimated terminal date:

Principal investigator(s) only Degree Position and organization

Cooperating groups (foundations, Federal and State agencies, etc.):

If this represents work toward an academic degree, please state degree ___________
(Please do not report masters' theses unless they represent work beyond a doctorate, as in dentistry.)

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE - Welfare Administration - Children's Bureau

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RESEARCH RELATING TO CHILDREN

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Bulletin I, Supplement 3 (August-December 1950)
Bulletin I, Supplement 4 (January-April 1951)

Bulletin II, Supplement 2 (November 1952-May 1954)
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Bulletin 9 (August 1958-February 1959)
Bulletin 10 (March-July 1959)
Bulletin 11 (August 1959-February 1960)
Bulletin 13 (August 1960-January 1961)
Bulletin 15 (October 1961-June 1962)

An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. Additional free copies are available to directors of research centers and to libraries upon direct request to the Clearinghouse, Children's Bureau, Washington, D. C. 20201.

The Clearinghouse will be happy to add anyone to the mailing list to be notified whenever a new issue is published.

bulletin no. 18

RESEARCH relating to CHILDREN

U. S. DEPARTMENT
of HEALTH,
EDUCATION,
and WELFARE

WELFARE ADMINISTRATION

• Children's Bureau
1965

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CHILDREN'S BUREAU - Katherine B. Oettinger, Chief
Division of Research - Helen L. Witmer, Director
Child Life Studies Branch - Elizabeth Herzog, Chief

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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RESEARCH relating to CHILDREN

bulletin 18

studies in progress on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIAL, ECONOMIC, and CULTURAL INFLUENCES
- HEALTH SERVICES and SURVEYS
- SOCIAL SERVICES

March-December 1964

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FOREWORD

This Bulletin like previous issues, includes reports of research in progress or research very recently completed. It does not report again studies included in Bulletin 3 through 17 even though they are still continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse March 1, 1964 through December 31, 1964.

The Clearinghouse has only such information about the research projects as the abstracts provide. Publication references and plans are given for some of the projects, but the Clearinghouse cannot attempt to keep track of the final publication of the studies. The reader who wishes to obtain further information about any of the projects reported should write directly to the investigator or check professional journals in the appropriate field.

For the Clearinghouse, I wish to thank those who have submitted reports and to acknowledge the valuable assistance of the National Council on Crime and Delinquency, the Clearinghouse on Current Morbidity Statistics Projects of the U. S. Public Health Service, and the several foundations which provide us with information about recent research grants.

Katherine B. Oettinger

Katherine B. Oettinger
Chief, Children's Bureau
WELFARE ADMINISTRATION

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 227 is a form for letting us know of other investigators who are working in the field. Page 229 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

18-A-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver 20, Colo.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; Nutrition Foundation; National Live Stock and Meat Board; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Appropriate medical or scientific journals every year. Publication lists available.

18-A-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Investigator(s): Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

18-A-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

18-A-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from prepuberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Assistant Professor of Physiology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publication: Numerous journal articles; one book is planned, another possible.

18-A-5 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (35 years).
Subjects: Full term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above average group. 100 offspring of these subjects, age range from a few months to about 16 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs and skeletal X-rays taken at most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.
Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Associate Research Psychologist, Institute of Human Development, University of California, Berkeley 4, Calif.
Cooperating group(s): Institute of Human Development, University of California.
Publication: Studies in the Development of Young Children, University of California Press, 1940. Growth Diagnosis, University of Chicago Press, 1959. Child Development 12:167-173, 1941; 27:45-74, 1956. American Psychologist 10: 805-818, 1955. Monograph, Society for Research in Child Development 28, 1963.

18-A-6 THE MEDFORD, OREGON BOYS' GROWTH STUDY, 7 TO 18 YEARS

Purpose: To construct structural, strength, and motor cross-sectional, convergence, and longitudinal growth curves for boys 7 to 18 years of age; to study individual differences at all ages; to relate the various structural, strength, and motor tests to maturity, physique type, social-personal adjustment, interests, and scholastic aptitude and achievement; to contrast all traits for boys at different levels of athletic ability.
Subjects: Cross-sectional sample: 40 boys at each age, 9 through 15 years. Longitudinal sample: over 100 boys at each age, 7, 9, 12, and 15 years.
Methods: (1) Construction of mean growth curves; study of individual differences by use of range, standard deviation, and coefficient of variation; (2) contrast of maturity groups and somatotype categories; (3) factor analyses at single ages; (4) contrast of athletes and nonparticipants, longitudinally and cross-sectionally; and (5) determination of relationships through correlation, multiple correlation, and partial correlation; utilization of multiple regression equations.
Duration: October 1956-May 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor of Physical Education, University of Oregon, Eugene, Oreg.
Cooperating group(s): Medford, Oregon Public Schools; Southern Oregon College; Athletic Institute; Curriculum Development Fund of the Oregon State Department of Education; Office of Scientific and Scholarly Research and School of Education In-Service Program, University of Oregon.
Publication: To date, 34 completed master's theses and doctoral dissertations are available in Microcard form; a number of articles and review statements have been published.

18-A-7 PATTERNS OF SOOTHING AND EXCITATION IN NEONATES

Purpose: To investigate the role of excitatory and inhibitory patterns in neonatal development through use of behavioral ratings and heart rate measurements. This research is part of a long-term study of regulatory principles and mechanisms which govern neonatal behavior (see Bulletin 5, Research Relating to Children).
Subjects: Normal, healthy, 2 to 5 day old full term babies born at Bronx Municipal Hospital Center.
Methods: Heart rate and behavioral ratings obtained for all experimental sessions. Each neonate tested at three sessions: test, retest on reactions to a series of soothing stimuli, and one session of trials of excitatory stimuli. Soothing stimuli applied when neonates are aroused are a tone, rocking, sweetened pacifier inserted in babies' mouths, immersion of babies' feet in warm water, and a control period. Each stimulus condition applied three times. Excitatory stimuli applied after feeding when neonates are quiescent are a tone, cold disc applied to the abdomen, and rocking.
Findings: Data analyzed with respect to (1) relationship between heart rate and behavioral ratings; (2) individual differences in overall soothability and in most effective soothing stimuli; (3) test-retest reliability on successive days; and (4) relationship between excitatory and inhibitory patterns.
Duration: January 1962-continuing.
Investigator(s): Sibylle Escalona, Ph.D., Professor of Psychology in Psychiatry, Wagner H. Bridger, M.D., Assistant Professor of Psychiatry, Beverly M. Birns, Ph.D., and Marion Blank, Ph.D., Instructors in Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-A-8 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semiannual follow-up of more than 2,000 children registered at the Institute.
Methods: School Series: initially based on 600 school children in 5 schools (now 22 schools), ages 6-12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays. American Negro Series: 150 Negro children with normal occlusion selected to study with a view to establishing tentative standards of facial growth. Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc. Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made. Orthodontic Treatment Series: a small pilot study of 15 white boys, age 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment. Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate. Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as facio-dental growth dysplasia. Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern. Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional

stability, and other aspects of classroom behavior to see if there is any real correlation.
Duration: 1947-1967.
Investigator(s): Wilton M. Krogman, Ph.D., Director, Philadelphia Center for Research in Child Growth and F. E. Johnston, Ph.D., Assistant Professor of Anthropology, University of Pennsylvania, Philadelphia, Pa.
Cooperating group(s): Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

18-A-9 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns of all children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Co-chairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto, Calif.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publication: Journal of Clinical Endocrinology and Metabolism, 22:1127-1129, November 1962; Journal of Pediatrics, 62:5:631-645, May 1963.

18-A-10 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland 1, Oreg.
Cooperating group(s): University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Recent articles: Radiology, April 1961; July 1962; Journal of Dental Research, July-August 1961; July-August 1962. Human Biology, February and September 1962.

18-A-11 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4483 Cleveland children; 134 Boston children; and a sample of Detroit children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to provide standards of reference.
Duration: 1948-1966.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., Professor and Head, Department of Anatomy, Stanford University, Stanford, Calif.
Cooperating group(s): Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.
Publication: Current standards: Radiographic Atlas of Skeletal Development of Elbow and Shoulder; Radiographic Atlas of Skeletal Development of Hip. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.

18-A-12 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 15 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956.
Investigator(s): Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Oreg.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publication: Johns Hopkins Magazine, June 1959.

18-A-13 RESEARCH ON SPEECH AND LANGUAGE DISORDERS

Purpose: To investigate etiology, prevention, and rehabilitation in speech and language disorders of children with cerebral palsy, aphasia, cleft palate, endocrine disorders, Mongolism, or mental deficiency.
Subjects: Study group chosen from clinical population, approximately 1,500 cases, and matched with normal controls.
Methods: Basic studies on anatomy and functional laryngx, respiration, etc., including X-ray measurements and similar techniques; various other research methods (generally behavioral items) depending upon area under study.
Initiation date: 1934.
Investigator(s): Martin F. Palmer, Sc.D., Director, Institute of Logopedics, 2400 Jardine Dr., Wichita 19, Kans.
Cooperating group(s): Federally supported.
Publication: Articles appearing regularly in Journal of Speech and Hearing Disorders, Journal of Speech and Hearing Research, Cerebral Palsy Review, etc.

18-A-14 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Initiation date: 1936.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group(s): Lilly Endowment, Inc.
Publication: Published in Union College Studies in Character Research. Also Dimensions of Character, Macmillan, 1956.

GROWTH AND DEVELOPMENT

General

18-B-1 THE DEVELOPMENT OF ATTACHMENT BEHAVIOR IN THE FIRST YEAR OF LIFE

Purpose: To observe the course of development of attachment behavior, emphasizing those responses which seem most likely to be important components of attachment behavior (e.g., crying, smiling, following with the eyes, vocalization, postural adjustment and holding on, etc.), and the differential frequency and intensity of these responses as displayed to different figures; to observe influence of mother's behavior and methods of infant care upon this development, and upon nature and strength of attachment of the infant to her; to observe effect of the nature and strength of child's attachment to his mother upon his behavior toward other persons and objects.
Subjects: 36 infants in white, middle class families, obtained through pediatricians in private practice. Half the infants are to have full-time mothers, and half part-time mothers.
Methods: Four-hour visits once every three weeks from birth to 12 months of age. Chief emphasis is upon direct observation of behavior as it occurs spontaneously during the visit, paying particular attention to behavior occurring in certain situations identified as "critical" which are most likely to elicit attachment behavior. Direct observation is supplemented by interview of mother and other caretakers, by administration of the Griffiths Scale of Infant Intelligence, and by ratings of mother, caretakers, and infants.
Duration: October 1962-September 1967.
Investigator(s): Mary D. Ainsworth, Ph.D., Professor of Psychology, Johns Hopkins University, Baltimore, Md.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.

18-B-2 A TRANSITIONAL CARE NURSERY FOR THE NEWLY BORN

Purpose: To obtain information concerning the clinical behavior of the neonate by following the infant in an intensive care unit similar to those units utilized for the care of postoperative patients.
Subjects: Neonates: term, premature, Cesarian section, and other "high risk" infants.
Methods: Infants are chosen by selection of mother during labor. Each infant is followed from birth to 24 hours of age by a physician-nurse team utilizing observational and physiologic monitoring techniques.
Findings: The healthy neonate appears to undergo an orderly sequence of changes in vital signs and activity during first 24 hours. This seems to be associated with two oscillations in autonomic activity--an outburst of sympathetic activity occurring at delivery, followed by a second reaction at two to six hours.
Duration: January 1963-December 1964.
Investigator(s): Murdina M. Desmond, M.D., Professor of Pediatrics, and Arnold J. Rudolph, M.D., Assistant Professor of Pediatrics, College of Medicine, Baylor University, Houston, Tex.
Cooperating group(s): John A. Hartford Foundation, Inc.
Publication: Journal of Pediatrics, 62:3:307, 1963; Obstetrics and Gynecology, 23:1:28-36, January 1964; Abstract, Society for Pediatric Research, 1962 (to be published); Postgraduate Medicine, in press.

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18-B-3 A STUDY OF THE MATURATION OF THE SLEEPING AND WAKING STATES IN PREMATURE INFANTS

Purpose: To study maturation of sleeping and waking states of premature infants from six months gestation till normal term of nine months. It is assumed that significant changes in patterns of sleep and arousal will be detectable as premature infant matures.
Subjects: 100 infants, both premature and full-term controls.
Methods: Infants will be followed clinically for first two years of life in order to detect any infant who might deviate significantly from normal in his development; significance or insignificance of variations in early sleep patterns for predictions of later development can thus be determined. Levels of sleep and wakefulness will be judged by observation correlated with EEG's, actograms, respirations, electromyograms, eye movements, and body temperature recorded continuously during three-hour intervals. Speed of transitions from one state to another and degree of sleep and arousal achieved at six, seven, eight, and nine months of gestation will be focal point. Although primary study is of spontaneous sleep and arousal, changes in state induced by sound stimulation using Wedenberg modification of audiometer will also be recorded.
Investigator(s): Arthur H. Parmelee, Jr., M.D., Associate Professor of Pediatrics, Medical Center, University of California, Los Angeles 24, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-B-4 THE MODAL ADOLESCENT

Purpose: To determine what exactly is normal, healthy, or adaptive during the adolescent period and what is not.
Subjects: 114 modal adolescents selected in fall 1962, from total freshman male population in two local high schools.
Methods: Individual depth interviews for every subject every three to four months for three years; genetic background data; teacher rating and school performance; psychological testing (projectives); and parent interviews and ratings.
Findings: Modal adolescents exhibit: (1) almost complete absence of gross psychopathology, physical defects, and physical illness; (2) ability to experience effects flexibly and to actively bring their conflicts to successful resolutions; (3) evidence of specific struggles with aggression and sexual impulses; and (4) relatively good object relationships with adults.
Duration: Fall 1962-1965.
Investigator(s): Daniel Offer, M.D., Assistant Director and Career Investigator, Institute for Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital, Chicago 16, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Archives of General Psychiatry, Vol. 9, November 1963; another article in press.

Physical

18-C-1 GROWTH OF THE BUCCO-FACIAL MUSCULATURE

Purpose: To investigate the change with age of the bucco-facial musculature in children; to investigate the difference in extensibility of the bucco-facial musculature in monozygotic and dizygotic twins.
Subjects: Monozygotic and dizygotic twins, 5 to 15 years of age.
Methods: Standard anthropometric measurements of the body and limbs and cranio-facial complex; full-face and profile color photographs; antero-poste-

rior and lateral cephalometric X-rays; X-rays of hand and wrist; dental impressions of upper and lower jaws; extensibility of buccal musculature; and serological studies.
Duration: January 1963-December 1965.
Investigator(s): Edward I. Fry, Ph.D., Associate Professor of Anthropology, University of Nebraska, Lincoln, Nebr. (Reported by Louise M. Robbins, Instructor in Anthropology, University of Nebraska.)
Cooperating group(s): College of Dentistry, University of Nebraska.
Publication: To be published upon completion of study.

18-C-2 HEAD GROWTH IN PREMATURE INFANTS

Subjects: Premature infants.
Methods: Infants are fed as much formula as they desire; findings for infants fed regular and infants fed concentrated formulas are contrasted.
Findings: Head growth may be more normal when concentrated formulas are used.
Duration: 1957-1965.
Investigator(s): Hans G. Keitel, M.D., Head, Department of Pediatrics, Jefferson Medical College of Philadelphia, Philadelphia 7, Pa.

18-C-3 INFANT NUTRITION

Purpose: To determine changes in the immune response of infants by alterations in nutrition.
Subjects: 300 experimental and 300 control infants taken from Infant Welfare Stations, Chicago Board of Health.
Methods: Growth and development studied; nutritional status determined by blood chemical analysis; antibody response to immunization and morbidity.
Duration: January 1964-January 1965.
Investigator(s): Morten B. Andelman, M.D., Consultant to Chicago Commissioner of Health, 4751 W. Touhy Ave., Lincolnwood 46, Ill.
Publication: To be published upon completion.

18-C-4 SOYBEAN ALLERGY IN CHILDREN

Purpose: To observe the frequency and mode of sensitization to this allergenic food.
Methods: Clinical studies; immunologic techniques.
Findings: It seems that by purposeful feeding of soy milks, as well as by adulteration of many ordinary foods with soy flours and flavorings, and by the inadvertent contamination of the atmosphere in the manufacture of many plastics and other products, a vast number of the allergic population is being sensitized to a large botanical group of foods.
Investigator(s): Joseph H. Fries, M.D., Director of Allergy, Methodist Hospital, Brooklyn, N. Y.
Cooperating group(s): Martin Foundation.
Publication: Papers have been presented to the American Academy of Allergy and the Academy of Pediatrics.

18-C-5 NUTRITIVE VALUE OF VEGETABLE PROTEINS IN INFANTS

Purpose: To conduct a follow-up of short-term nitrogen balance studies (rice, wheat, soya, cottonseed, peanut meal, combinations, and supplements) by long-term administration of some of more promising vegetable proteins and evaluation

of their effect on growth and development; to look for possible subtle deficiencies or defects which may arise.
Methods: Vegetable products will be given as sole source of protein for three months and results will be compared with those obtained during a similar period on milk. Various physical parameters such as weight, length, head circumference, liver size, skinfold thickness, and upper arm circumference will be measured at intervals as well as a number of biochemical determinations. Every six weeks nitrogen and electrolyte balances will be carried out in order to relate growth to these balances.
Duration: Not reported-1967.
Investigator(s): Russell J. Blattner, M.D., Professor, and L. Leighton Hill, M.D., Assistant Professor, Department of Pediatrics, College of Medicine, Baylor University, Houston, Tex. 77025.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-C-6 NUTRITIONAL STATUS SURVEY (BIOCHEMICAL FINDINGS) ON ADOLESCENT MALES AND FEMALES

Purpose: To determine the average blood levels in healthy adolescents for certain nutrients such as ascorbic acid, carotene, and vitamin A. In addition, hematocrit values and urinary excretion levels for thiamine and riboflavin are also being done. Transketolase determinations on red cell hemolysates are included.
Subjects: Junior high school students in city of Syracuse and Onondaga County.
Methods: ICNND methods for biochemical determinations are used except for transketolase. (Journal of Nutrition, 71:273-282, 1960.)
Duration: July 1962-1967.
Investigator(s): Myron Brin, Ph.D., Associate Professor of Biochemistry and Medicine, Upstate Medical Center, State University of New York, Syracuse, and Marjorie Dibble, M.S., Assistant Professor of Foods and Nutrition, Syracuse University, Syracuse, N. Y.
Cooperating group(s): National Vitamin Foundation.

18-C-7 OBESITY IN ADOLESCENCE

Purpose: To study characteristics of malnutrition in adolescents with particular reference to obesity: typing of obesity, etiological factors in development of obesity, and psychological effects of obesity.
Subjects: Adolescent girls.
Investigator(s): Jean Mayer, Ph.D., D.Sc., Associate Professor of Nutrition, Harvard School of Public Health, Boston, Mass.
Publication: Representative publications of work already done may be found in the following: American Journal of Clinical Nutrition, 12:1 and 13:35, 1963; 14:211, 1964; Journal of the American Medical Association, in press.

18-C-8 LEFT-RIGHT DISCRIMINATION IN NORMAL AND RETARDED CHILDREN

Purpose: To develop a left-right discrimination test and relate performance on this test to handedness, laterality-directionality, reading ability, intelligence, and performance on academic achievement tests.
Subjects: Average public school children and selected retarded children.
Duration: March 1964-June 1966.
Investigator(s): Daniel R. Boone, Ph.D., Associate Professor of Hearing and Speech, Medical Center, University of Kansas, Kansas City, Kans. (Reported by June Miller, Ed.D., Associate Professor and Educational Director, Hearing and

Speech Department, Medical Center, University of Kansas.)
Publication: Journal publications as indicated.

18-C-9 DEVELOPMENT OF MOTOR PERFORMANCE OF CHILDREN

Purpose: To examine individual patterns of motor performance and development in a longitudinal analysis. The two basic concerns will be consistency of performance, as measured by relative performance on different tests, and stability of performance, as measured by relative achievement on the same test in year to year comparisons.
Subjects: Approximately 50 boys and 50 girls, age 6 at time of initial testing; approximately 50 boys and 50 girls, age 8.
Methods: Eight motor performance tests (30 yard dash, 50 foot hop, standing broad jump, beam balance, beam walk, throw for distance, side step, and accuracy throw) will be administered to children at six-month intervals for a period of three years. The six-year old children will be tested when six, seven and eight years; eight-year olds will be tested when eight, nine and ten years. Analyses will be based upon individual patterns of performance and development.
Duration: October 1963-May 1966.
Investigator(s): Jack F. Keogh, Ed.D., Assistant Professor of Physical Education, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): National Institute of Mental Health, and National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Monograph summary at end of study; first phase of the study was normative in nature, including 436 children ages 6 through 9, and a monograph is in process to summarize this information.

18-C-10 PHYSICAL WORKING CAPACITY OF ADOLESCENTS

Purpose: To investigate maximum working capacities of adolescents (oxygen uptake per minute per kilogram body weight); to construct a nomogram for prediction of these maximal values from pulse reactions to submaximal steady-state work.
Subjects: 200 males and 200 females from local high schools.
Methods: Bicycle ergometer will be employed. Exercise EKG's and physiologic age of subjects, determined by means of hand-wrist X-rays, will be recorded.
Duration: July 1963-June 1966.
Investigator(s): Howard G. Knuttgen, Ph.D., Assistant Professor, School of Education, Boston University, Boston 15, Mass.
Cooperating group(s): Army Medical Research and Development Command, U. S. Department of Defense.

18-C-11 RELATIONSHIP BETWEEN GROWTH AND SELECTED PHYSICAL PERFORMANCES

Purpose: To determine over a three-year period: (1) changes in performances of subjects on AAHPER physical fitness tests; (2) changes in selected anthropometric measurements; (3) relationship between changes in anthropometric measures and changes in performance on fitness tests.
Subjects: Male students in grades 5 through 9.
Methods: Subjects will be tested and measured twice each year, the measures including weight, stature, stem length, limb length, soft tissue girths, and thickness of subcutaneous tissue.
Duration: Spring 1964-spring 1967.
Investigator(s): Conrad Eckstrom, Ph.D. Candidate, and Louis E. Alley, Ph.D.,

Professor and Head, Department of Physical Education, State University of Iowa, Iowa City, Iowa.
Publication: To be published in Research Quarterly (American Association for Health, Physical Education, and Recreation).

18-C-12 RELATIONSHIP BETWEEN SPECIFIC ASPECTS OF PHYSICAL DEVELOPMENT AND INTELLIGENCE OF CHILDREN

Purpose: To investigate the relationship between specific aspects of physical development and intelligence in children at the first grade level.
Subjects: All first grade students of Thomas Metcalf Laboratory School, Illinois State University. Two classes are matched groups of gifted children; the third class is a group of normal children selected by the criteria established by the admissions committee of the school.
Methods: Interrelationships will be drawn between measures of: (1) age to nearest month, height to nearest inch, weight to nearest half pound; (2) gross motor skills of running, throwing, and jumping as measured by a four-second run, overhand throw for distance, and a standing broad jump; (3) fine motor coordination as measured by a modification of the "Placing" and "Turning" tests of Minnesota Rate of Manipulation Test; (4) intelligence as measured by Stanford-Binet L-M.
Duration: March 1964-October 1970.
Investigator(s): Betty J. Keough, Ph.D., Associate Professor, and Evelyn L. Schurr, Ph.D., Assistant Professor, Department of Health and Physical Education, Illinois State University, Normal, Ill. (Reported by Paul Dohrmann, Ph.D., Assistant Professor of Health and Physical Education, Illinois State University.)
Publication: To be submitted to Research Quarterly; Illinois State University, Teacher Education.

18-C-13 DENTAL MORPHOLOGICAL VARIATION IN POPULATIONS

Purpose: Dentition studies.
Subjects: Amerinds.
Methods: Field studies of genetic parameters including teeth and blood; casts, photos, etc.
Findings: Inheritance patterns of tooth forms.
Duration: April 1963-March 1967.
Investigator(s): Albert A. Dahlberg, D.D.S., Associate Professor, Department of Anthropology, University of Chicago, Chicago 37, Ill.
Publication: To be submitted for journal publication.

18-C-14 A COMPARATIVE ANALYSIS OF TOOTH AND ARCH SIZES

Purpose: To test the theory that there are ethnic differences in tooth and arch sizes in children.
Subjects: Models of arches and deciduous teeth; all records of 100 North American Negro boys and same records of 100 North American Caucasian boys.
Methods: Measurement of deciduous teeth and arches on models, permanent teeth of some subjects on periapical X-rays, and erupted permanent teeth of same subjects on models.
Duration: March-December 1964.
Investigator(s): Matthew Mitchell, D.D.S., Assistant Professor of Orthodontics, College of Dentistry, Howard University, Washington, D. C.
Cooperating group(s): Institute for Child Growth, Philadelphia.
Publication: To be submitted to an orthodontic journal.

18-C-15 LONGITUDINAL STUDY OF GROWTH AND DEVELOPMENT OF THE DENTITION

Purpose: To help determine the etiology of malocclusion.
Subjects: Children followed from deciduous dentition to permanent.
Methods: Diagnostic records taken annually; full series - periapical films, cephalogram, lateral plate, portrait, intra-oral Kodachrome, carpal index, and models.
Duration: 1960-1970.
Investigator(s): I. Steur, D.D.S., N. A. Di Salvo, D.D.S., Ph.D., and Henry I. Nahoum, D.D.S., Division of Orthodontics, Columbia-Presbyterian Medical Center, New York, N. Y.

18-C-16 A COMPARATIVE STUDY OF SELECTED TRAITS OF MALOCCLUSION

Purpose: To collect records suitable for evaluation of certain principles or concepts which have been hypothesized and tentatively accepted as bases for teaching orthodontic and pedodontic principles to students; to test certain concepts for which adequate clinical evidence is lacking.
Subjects: Selected group of patients in pedodontic clinic.
Methods: Obtain and analyze serial set of records for each subject, including dental casts, facial and oral photographic records, cephalometric and intraoral radiographic records, and past and current oral and general health records.
Duration: November 1962-indefinite.
Investigator(s): William Foster O'Meara, D.M.D., Associate Professor, William G. Goodale, D.D.S., Professor, and George F. Andreasen, D.D.S., Assistant Professor, College of Dentistry, State University of Iowa, Iowa City, Iowa.

18-C-17 "NURSING BOTTLE DENTITION"

Purpose: To determine: (1) frequency of occurrence; (2) relationship of amount of decay to length of time child spends nursing from bottle; and (3) relation of infection to upper respiratory infections.
Subjects: Children in pedodontic clinic at New York University Hospital and at Beth Israel Hospital Dental Clinic.
Methods: Interviews; examination of hospital records and pediatric consultations; histologic examination of affected teeth.
Findings: Preliminary investigations indicate children going to sleep with nipple of nursing bottle in mouth show a marked tendency toward a characteristic pattern of decay and erosion, characterized by large carious lesions on all teeth in the mouth except lower anteriors.
Duration: September 1963-not reported.
Investigator(s): Stephen J. Moss, D.D.S., M.S., Instructor in Pedodontics, College of Dentistry, New York University, New York, N. Y.

Perceptual, cognitive, and motor

18-D-1 CORRELATION BETWEEN COGNITIVE-MOTOR DEFICITS IN CHILDREN AND LEARNING DISABILITIES

Purpose: To test hypothesis that deficits in major perceptual-cognitive-motor functions have a relationship to learning difficulties and behavior problems in school.
Subjects: Children in grades 1, 3, and 5 of a public school system; 40 at each grade level; 40 in special classes for mentally retarded.

Methods: Subjects are given complete perceptual-cognitive-motor battery developed at Lafayette Clinic, with measures of visual, auditory and tactile perception, fine motor control, gross motor development, etc., as well as achievement testing and teachers' behavior rating.
Duration: June 1962-indefinite.
Investigator(s): Jean S. Braun, Ph.D., Chief Psychologist, Children's Service; Eli Z. Rubin, Ph.D., Director of Rehabilitation; Lela Llorens, M.A., O.T.R., Head of Occupational Therapy; and Gayle Beck, M.Spec. Ed., Supervisor, School Department, Lafayette Clinic, 951 E. Lafayette St., Detroit, Mich.
Publication: Papers in preparation.

18-D-2 SPEECH, LANGUAGE, AND HEARING OF CHILDREN

Purpose: To develop a battery of speech, language, and hearing tests for three-year old children; to enable investigations correlating deficiencies in speech, language, and hearing with obstetric, pediatric, neurological, and psychological examinations and history; to study relationships between speech, language, and hearing measures at three years with failures in selected abilities such as reading and vocabulary at seven years.
Subjects: 510 children followed thus far from birth to age 3.
Methods: 12 collaborating institutions, coordinated through Perinatal Research Branch, are collecting data. Subjects identified prenatally with recording of events during pregnancy and delivery by the obstetrician; examinations accomplished at four months by a pediatrician, at eight months by a psychologist, at 12 months by a neurologist. In the present phase, a test battery administered to three-year old children, has screened for speech, language, and hearing defects and is now being analyzed. Psychological testing will be accomplished at four years. Abilities such as reading, language usage, etc. will be explored at approximately seven years.
Duration: 1964-1965.
Investigator(s): Frank Lassman, Ph.D., and Elaine Engelbart, M.A., Department of Physical Medicine and Rehabilitation, Medical Center, University of Minnesota, Minneapolis, Minn. (Reported by Frederic J. Kottke, M.D., Ph.D., Professor and Head, Department of Physical Medicine and Rehabilitation, Medical Center, University of Minnesota.)
Cooperating group(s): Perinatal Research Branch, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-D-3 BEKESY AUDIOMETRY WITH CHILDREN

Purpose: To evaluate effects age and intelligence have upon Bekesy audiometry--thresholds, tracing patterns, and reaction to interrupted and continuous presentation of stimulus.
Subjects: 15 children for each of three age groups: 4 to 6 years; 6 to 8 years; and 8 to 10 years. There will be three such groups with normal hearing and three with hearing loss, all matched in terms of age, sex, and I.Q.
Methods: Each child will be tested with continuous and interrupted stimulus, as well as with discrete and continuous frequencies.
Duration: September 1964-August 1966.
Investigator(s): John J. O'Neill, Ph.D., Director, Speech and Hearing Clinic, and Earl Stark, Ph.D., Assistant Professor, University of Illinois, Champaign, Ill.
Publication: To be submitted to Journal of Speech and Hearing Research.

18-D-4 RESPONSES OF THE HUMAN NEONATE TO REPEATED SENSORY STIMULATION

Purpose: To measure response in newborns to repeated sound stimulation varying in duration, intensity, and intervals between stimulus presentations.
Subjects: Normal, full-term newborns ranging from 1 to 5 days in age, divided into 2 groups of 10 each, and tested for 2 days; 2 control groups.
Methods: Infants are tested in a temperature controlled, sound attenuated laboratory. Stimulus presentations, durations, and intervals are programmed and automatically recorded on an ink-writing oscillograph; heart rate is picked up from precordial leads by suction electrodes and is recorded both through a cardiotachometer and the electrocardiogram; respiration is detected by a mercury strain gauge taped at the costal margin. One group received a 10-second tone for 15 trials on day one, with a 90-second interstimulation interval and a 2-second stimulus for 15 trials on day two. Procedure was reversed for second group. Control groups, matched for second-session age of subjects in first experiment, were presented with same stimuli.
Findings: With a stimulus lasting 10 seconds, the heart rate response habituated in three trials from an acceleration maximal at 16.5 beats to one maximal at 8.4 beats. There was no spontaneous recovery after 24 hours. With a stimulus lasting 2 seconds, acceleration was briefer and there was no significant habituation of response. Older infants of control experiment showed a similar difference between the 2- and 10-second stimuli, indicating that diminished response to 10-second stimulus on second day was not a function of age.
Duration: July 1963-September 1966.
Investigator(s): Frances Graham, Ph.D., Associate Professor, and Rachel Keen, Ph.D., Postdoctoral Fellow, Medical School, University of Wisconsin, Madison, Wis.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *American Psychologist* (in press).

18-D-5 THE DEVELOPMENT, IN INFANTS, OF THE ABILITY TO DISCRIMINATE PATTERN GRADIENTS AS A CUE TO DEPTH

Purpose: To test the hypothesis that children will avoid a variegated pattern as if avoiding actual depth.
Subjects: Infants, able to crawl.
Methods: Walk and Gibson's visual cliff--varying pattern under "deep side" rather than actually varying depth of surface.
Duration: June 1964-June 1965.
Investigator(s): James C. Mancuso, Ph.D., and Morris E. Eson, Ph.D., Chairman, Department of Psychology, State University of New York, Albany, N. Y.
Cooperating group(s): Research Foundation, State University of New York.
Publication: To be submitted to a developmental journal.

18-D-6 PRELIMINARY INVESTIGATION OF RELATIONSHIP OF INDIVIDUAL'S VISUAL SPACE PERCEPTION AND KINESTHETIC SPACE

Purpose: To investigate pattern of changes of visual space and kinesthetic space.
Subjects: 28 fourth grade pupils in a local public school.
Methods: Using a mirror arrangement, localizing a virtual image without visual feedback of hand localization.
Findings: Experiment shows that there are definitely individual patterns of visual-kinesthetic matching. Attempt now is to try to evaluate the difference in patterns.
Duration: January 1964-June 1965.

Investigator(s): John W. Streff, O.D., Director of Visual Research, Gesell Institute of Child Development, New Haven 11, Conn.
Cooperating group(s): Gesell Institute of Child Development Visual Research Fund.

18-D-7 STUDIES OF PERCEPTUAL DEVELOPMENT

Purpose: To measure age changes in susceptibility to well known visual-geometric illusions in nursery school children.
Subjects: Nursery school children in Ingham County.
Methods: PSE's on five optical-geometric illusions measured by the Up-and-Down Method.
Duration: September 1964-June 1965.
Investigator(s): Charles Hanley, Ph.D., Professor of Psychology, Michigan State University, East Lansing, Mich.
Publication: To be published upon completion of study.

18-D-8 AUDITORY BEHAVIOR IN HUMAN NEONATES

Purpose: (1) To determine, under well controlled conditions, the effects of signal complexity, duration, and frequency upon incidence of response, and distribution of four kinds of reflex behavior during response; (2) to determine whether any systematic changes in behavior are found during first four days of life; and (3) to establish criteria for observer judgments of response by comparing objective ECG findings with observer judgments based upon motion picture data.
Subjects: 30 human neonates, each seen daily (same time of day) during first four days of life.
Methods: A 30-signal battery consisting of: (1) a 500 cps pure tone; (2) a 500-1000 cps band-pass; (3) 4000 cps pure tone; (4) 4000-4500 cps band-pass; and (5) white noise will be programmed on tape and presented for 300 msec. and (white noise only) one minute. Intervals during which motion picture data will be obtained will be controlled by programmer, and response to auditory stimulation will be classified on basis of motor, eye, arousal, and orienting reflexes. Differential effects associated with age will be analyzed in reference to these factors and also two quantitative measures of temporal relations will be derived: (1) response-latency, i.e., the time lapse between presentation of a stimulus and onset of a response pattern; and (2) response-time, i.e., the time consumed by given response patterns. Behavioral data will be compared with ECG findings derived from associated measures.
Duration: June 1964-May 1967.
Investigator(s): Rita B. Eisenberg, Sc.D., Director, Bioacoustic Laboratory, and David Baird Coursin, M.D., Director, Research Institute, St. Joseph Hospital, Lancaster, Pa.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Initial report on pilot findings will appear in Journal of Speech and Hearing Research, September 1964. Other reports on early research are in preparation.

18-D-9 AUDITORY PERCEPTION OF MUSICAL SOUNDS BY CHILDREN IN THE FIRST SIX GRADES

Purpose: To study, by means of a series of closely related projects, the auditory perception of musical sounds. These would each deal with the perception of musical elements treated individually or in combinations and would involve perception of rhythm, melody, timbre, and harmony. Such investigations

would provide much needed information regarding possible growth stages in auditory perception, as well as information concerned with general musical development of children.
Subjects: Students randomly selected from grades 1 through 6, with approximately equal numbers for each grade level.
Methods: Specially designed tests are administered to each subject; tests are tape recorded, as are pupil responses. Data are then subjected to intensive analysis.
Duration: August 1960-July 1965.
Investigator(s): Robert G. Petzold, Ph.D., Professor of Music and Education, University of Wisconsin, Madison, Wis.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be issued as a monograph; a series of articles are planned for publication in appropriate professional journals.

18-D-10 PERCEPTUAL REWARDS IN NORMAL AND DEVIANT DEVELOPMENT

Purpose: To study the role of perceptual experience generated by behavior in the cognitive development of normal, retarded, and disturbed infants and young children.
Methods: Methods of operant behavior analysis are adapted to record responses that bring about controlled visual and auditory events in child's normal environment. In studies with infants, perceptual feedback is controlled with a view toward identifying acquisition of reality concepts according to scheme proposed by Piaget. Studies with normal and retarded children at preschool and older age levels measure behavior sustained by perceptual feedback at different levels of variability, complexity, and predictability. Means are sought to apply experimental findings to development of automated diagnostic, therapeutic, and training procedures with handicapped children.
Duration: 1963-1966.
Investigator(s): Jane W. Kessler, Ph.D., Director, and Bernard Z. Friedlander, Ph.D., Research Associate, Mental Health Development Center, Western Reserve University, Cleveland 6, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-D-11 STUDIES OF SELECTIVE ATTENTION

Purpose: To trace developmental trends in the ability to select from among competing stimuli; to note age changes in effects of distraction on performance of a variety of cognitive tasks; and to contrast several classes of distractors.
Subjects: Children ranging in age from 5 to 14.
Methods: Presentation of taped distractors via headphones while subject performs such tasks as short-term memory, incidental learning, word associations, and repeating of auditory message.
Findings: Selective listening for one of two incompatible messages improves with age. Redundancy in message improves selective listening; this is truer for older than younger children. Distraction has a significant effect on memory for task-relevant material, but not for incidental material, although there is also a tendency for distraction to reduce incidental learning at higher age levels. Amount of incidental learning declines with age on a task where incidental material has high salience.
Duration: January 1964-September 1967.
Investigator(s): Eleanor E. Maccoby, Ph.D., Associate Professor of Psychology, Stanford University, Stanford, Calif.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: To be published in Journal of Experimental Psychology and/or Child Development.

18-D-12 DEVELOPMENTAL CHANGES IN PREFERRED "READING" ORDERS

Purpose: To describe the preferred orders in which preschool children "read" sequences of pictures arranged in different spatial configurations.
Subjects: Middle-class children, 3 to 5 years of age, from local nursery schools.
Methods: Sequences of pictures arranged vertically, horizontally, in the form of a cross, and in other spatial configurations are presented to the child, and he is asked to name all the things he sees. Data will be scored in terms of starting position, degree and kind of systematization used. In addition, estimates of handedness are obtained.
Findings: A completed pilot study has demonstrated feasibility of methods, and has indicated that even very young children show some systematic organization of simple spatial arrays. Collection of data using final set of arrays is just beginning.
Duration: January 1964-March 1965.
Investigator(s): Lila Ghent, Ph.D., Research Scientist, Department of Psychology, George Washington University, Washington, D. C. 20006.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in a psychological journal.

18-D-13 PERCEPTION OF CHARACTER, THEME, AND SETTING IN CHILDHOOD

Purpose: To determine developmental trends in children's perceptions of character, theme, and setting in pictorial materials.
Subjects: Elementary school children.
Methods: A set of 27 drawings representing all possible combinations of three themes, three settings, and three characters is used. Subjects are shown cards representing all possible combinations and asked to sort cards into three piles.
Findings: Preliminary results suggest that theme, or action, is first feature to stand out developmentally and that this is followed by character with setting perceived last with respect to age. Individual differences with respect to ability to shift bases of categorization were also observed as well as age differences in ability to maintain sorting set throughout examination.
Duration: June 1964-January 1965.
Investigator(s): David Elkind, Ph.D., Associate Professor of Psychology, University of Denver, Denver 10, Colo.
Publication: Child Development.

18-D-14 RELATIONSHIP BETWEEN PERCEPTUAL AND COGNITIVE DEVELOPMENT

Purpose: A pilot study to develop instruments to study perceptual and cognitive development longitudinally in young children.
Subjects: Nursery school children, 3 to 5 years of age.
Duration: June 1964-May 1965.
Investigator(s): Freda Gould Rebelsky, Ph.D., Assistant Professor of Psychology, and Philip Kubransky, Ph.D., Associate Professor, Boston University, Boston, Mass.
Cooperating group(s): Office of Education, U. S. Department of Health, Education,, and Welfare.
Publication: Planned in Child Development.

18-D-15 COGNITIVE DEVELOPMENT

Subjects: Children, 3 to 11 years.
Methods: Individual testing for perception and learning: (1) object discrimination; (2) left-right discrimination; and (3) perception of the vertical.
Findings: Postural and space orienting cues facilitate object discrimination. Children show same adaptation to body tilt as do college women but not as do college and adult men; no clear sex difference shown in children.
Duration: 1963-1964.
Investigator(s): Jerome E. Podell, Ph.D., Associate Professor of Psychology, San Francisco State College, San Francisco 27, Calif.
Cooperating group(s): San Francisco State College.

18-D-16 A GROUP OF STUDIES ON COGNITIVE DEVELOPMENT

Purpose: To study information processing and mechanism of concept attainment in children.
Subjects: Children, 2 to 16 years.
Methods: Experiments in absolute judgment, inductive concept attainment, etc.
Duration: Continuing.
Investigator(s): Sonia F. Osler, Ph.D., Associate Professor of Medical Psychology and Pediatrics, School of Medicine, Johns Hopkins University, Baltimore, Md. 21205.
Cooperating group(s): National Science Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-D-17 MEDIATED STIMULUS GENERALIZATION IN CHILDREN

Purpose: To study effects of such variables as habit strength, drive level, parental attitudes, sex differences, and training intensities upon mediated stimulus generalization in children; also, to study effects of MSG on transfer of training to a motor task.
Subjects: 96 children in grade 4; 115 children in grade 6.
Methods: Mediated stimuli to be employed are verbs of varying degrees of hostile connotation, scaled by subjects; mediated stimuli will be used in relation to a handle-pulling response whose amplitude, frequency, and perhaps latency will constitute dependent variables.
Duration: April 1963-April 1965.
Investigator(s): William J. Meyer, Ph.D., Associate Professor, and Arthur Orgel, Ph.D., Assistant Professor, Department of Psychology, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-D-18 A DEVELOPMENTAL AND NORMATIVE STUDY OF WORD ASSOCIATIONS IN CHILDREN

Purpose: To investigate developmental variations in oral word associations.
Subjects: 1056 children, grades 1 through 6.
Methods: Besides investigation of developmental variations in oral word associations, comparison between oral and written methods of administration was provided by gathering an additional sample of 526 written word association protocols from children in grades four through six. Further comparisons were made between present data and existing adult and child norms. Stimulus list was original Kent-Rosanoff word association list.

Findings: There was increased popular responding with age (i.e., more children at higher ages gave same associations to stimulus words than at lower). There was increased commonality of response with age and increased proportions of responses categorized as logical and mature. Ages and sex differences on parameters of mature responding were found favoring brighter children and girls. Oral and written methods yielded adequate agreement.
Investigator(s): Sister Serena Sheehy (Ph.D. Candidate, Catholic University of America), Director, Kennedy Child Study Center, St. Joseph's Hospital, Santa Monica, Calif. (Reported by Norman A. Milgram, Ph.D., Associate Professor of Psychology, Catholic University of America, Washington 17, D. C.)
Publication: Dissertation submitted to Catholic University, 1964.

18-D-19 LONGITUDINAL STUDIES OF HUMAN DEVELOPMENT

Purpose: To study significance and antecedents of conceptual strategies in young children, especially the tendency to display fast or slow decision times; to study consequents of individual differences in infant behavior patterns.
Subjects: Infants, preschool, and school age children.
Methods: Observations; autonomic reactions; test scores.
Findings: Children show dramatic intertask stability and long-term continuity on decision times in problems with high response uncertainty. Infants, 6 to 13 months, display clear preferences for humanoid visual patterns; there are stable, individual differences in distribution of attention.
Duration: September 1960-indefinite.
Investigator(s): Jerome Kagan, Ph.D., Chairman, Department of Psychology, Fels Research Institute, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Psychological Monographs*, 1964.

18-D-20 THE GROWTH OF COGNITIVE ABILITIES IN YOUNG CHILDREN

Purpose: To study the influence of language on development of problem-solving and conceptual ability in young hearing and deaf children.
Subjects: Deaf and hearing nursery school children, 3 to 6 years of age.
Methods: Children are presented a series of discrimination tasks employing a unifying concept (e.g., 1 versus 2 lights; 1 versus 2 sounds); tasks are generally presented in differing sensory modalities to prevent transfer on basis of physical generalization. A concept of number was required for transfer of a solution across different sensory modalities.
Findings: Deaf children were not inferior to hearing children on type of simple concepts employed at this age.
Duration: January 1963-December 1966.
Investigator(s): Marion Blank, Ph.D., Instructor, and Wagner H. Bridger, M.D., Assistant Professor, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.

18-D-21 THE RELATION OF EYE-HAND COORDINATION AND COLOR-MATCHING TO HANDWRITING AND SMALL MUSCLE MOVEMENTS IN FIRST GRADE CHILDREN

Purpose: To investigate coordination and small muscle movements.
Subjects: 149 preschool children later accepted in a private school.
Methods: Mental ability was measured by the WISC and reading readiness by the Metropolitan Reading Readiness Test. Teacher ratings of children's handwriting and small muscle performance in drawing, cutting, etc. were correlated with scores on Moore Eye-Hand Coordination and Color Matching Test for preschool

children, I.Q. and reading readiness tests, and Goddard Seguine Form Board Scores.
Findings: The following correlation coefficients were noted: Moore Speed with Goddard Seguine, .46; Moore Color Matching with Reading Readiness, .23; with Number Readiness, .22; with Total Readiness, .30; with Wechsler Verbal I.Q., .16; with Wechsler Performance I.Q., .31; with Wechsler Total I.Q., .32. Teacher ratings of poorest and best coordinated differentiated the groups significantly.
Duration: 1962-1966.
Investigator(s): Joseph E. Moore, Ph.D., Regents Professor of Psychology, Georgia Institute of Technology, Atlanta, Ga.
Cooperating group(s): Lovett Episcopal Day School.

18-D-22 MOVEMENT PATTERN CHECKLISTS: LONG FORM AND SHORT FORM, WITH PROFILE

Purpose: To provide a measuring device for objectified subjective judgment of movement pattern elements and characteristics of children, with special reference to the mentally retarded and other exceptional children; to provide an evaluative instrument for measuring progress of special education children in gross motor therapy; to provide an instrument to objectify evaluation of exceptional children's motor behavior in order to facilitate a comparative basis both in investigations relative to exceptional children and in work with individual children and groups; and possibly to assist in quantifying and qualifying certain measures of motor behavior of children distinct from those elements commonly called motor ability (movement patterns).
Subjects: Children in a special motor therapy program for underachieving public school children; pupils in local schools and in several special schools and programs for exceptional children.
Methods: Literature review for relevant information; observation and identification of patterns; preparation of preliminary checklists; pilot study with children and suggestions from judges; analysis of cinemagraphic records of movement patterns; revisions.
Findings: Preliminary instruments appear to be feasible and probably valid.
Duration: September 1962-June 1965.
Investigator(s): Barbara B. Godfrey, Ph.D., Professor of Physical Education, University of Missouri, Columbia, Mo.
Cooperating group(s): Indiana State Board of Health; Achievement Center for Children, Purdue University; Lafayette School System; Wabash School for Exceptional Children, Lafayette, Ind.; Woodhaven School for Exceptional Children, Columbia, Mo.
Publication: To be published for use locally by Achievement Center, Purdue University; to be submitted to Research Quarterly (American Association for Health, Physical Education, and Recreation) or Journal of Exceptional Children.

18-D-23 ACTIVITY LEVEL AND BEHAVIOR PATHOLOGY IN CHILDREN

Purpose: To measure objectively the general activity level of children.
Methods: A room will be used containing a standardized set of playthings designed in a manner which will allow automatic electrical recording of child's manipulation of them. Reliability and validity of technique will be evaluated; following this, it will be used to measure effects of drugs, environmental stimuli, and need states.
Investigator(s): Morton Rieber, Ph.D., Assistant Professor, Departments of Pediatrics and Psychiatry, and Homer F. Weir, M.D., Assistant Professor, Department of Pediatrics, College of Medicine, Baylor University, Houston 25, Tex.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Communication

18-E-1 THE RELATIONSHIP OF LANGUAGE DEVELOPMENT TO SOCIAL CLASS AND INTELLIGENCE

Purpose: To survey the cognitive and linguistic abilities of lower and middle class children; to identify and measure degree to which salient aspects of physical, social, and cultural environment foster or inhibit the development of specific cognitive skills and language abilities.
Subjects: A sample of 292 children, grades 1 and 5, from 12 New York City public schools, stratified by social class, race characteristics, and sex within the two grade levels.
Methods: (1) An extensive battery of 24 tests designed to measure specific cognitive and language abilities and consisting of standardized tests of reading and intellectual abilities was administered. In addition, a number of tests were constructed at the Institute to measure such component aspects of language ability as labeling, classifying, and relation; tests of concept formation and sensory discrimination were also included. (2) Information for each subject on approximately 50 family and social-environmental variables was obtained from interviews conducted with parents or guardians and from questionnaires mailed to parents. (3) Scores on the cognitive and language measures were analyzed by correlation techniques; they were done separately for each grade level in order to permit developmental comparisons within the sample. Correlation matrices for each grade level were subjected to factor analysis. (4) Analyses of variance were then done using major demographic and specific social background variables as independent variables. Dependent variables were the "factor marker" variables in addition to other selected performance measures.
Findings: A number of specific family and social background variables were found to interact significantly with social class and race in affecting level of performance on the cognitive and language measures.
Duration: October 1959-November 1965.
Investigator(s): Martin Deutsch, Ph.D., Director, Institute for Developmental Studies, Department of Psychiatry, New York Medical College, New York 29, N. Y. (Reported by Fay Boulware, Administrative Coordinator, Institute for Developmental Studies.)
Cooperating group(s): Taconic Foundation.
Publication: Paper read at American Psychological Association, Philadelphia, September 1963; submitted to Journal of Social Psychology. Teachers Journal, in press, Spring 1964. Monograph No. 2, Ithaca, N. Y.: The Society for Applied Anthropology, 1960. Papers read at American Orthopsychiatric Association, Chicago, March 1964. American Journal of Orthopsychiatry, 33:5:813-822, 823-831, 1963; another article in press. Journal of Social Issues, 20:24-35, 1964. Paper read at Arden-House Conference on Preschool Enrichment of Socially Disadvantaged Children, Harriman, N. Y., December 1962; Merrill-Palmer Quarterly, in press, Spring 1964. A comprehensive report of the study is being prepared in paperback form and will be available in 1965.

18-E-2 DELAYED LANGUAGE DEVELOPMENT: AUDITORY INPUT FACTORS

Purpose: To study auditory input receptor, effector, and control factors.
Subjects: Preschool-age children with delayed language and speech, excluding those who are primarily motor-affected, deaf in a classical sense, grossly intellectually deficient, schizophrenic, or epileptic; a control group.
Methods: A profile of auditory input for each subject will be constructed in terms of a six-point scale of factors reflecting receptor-effector-control aspects; profiles will be evaluated in terms of similar analyses of control

group. In most regards, each child in study group will be his own control. Series of structured problem-solving experiences are given, beginning with each child at first level of failure relative to developmental scale, the level of failure having been determined by diagnostic appraisal. Each child will be followed for three years, through preschool development period, in order to measure his achievement in each hierarchy of six-point scale relative to relations between auditory input and language development.
Duration: Not reported-August 1965.
Investigator(s): William G. Hardy, Ph.D., Associate Professor of Environmental Medicine, and staff, School of Hygiene and Public Health, Johns Hopkins University, Baltimore 5, Md.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-E-3 THE ACQUISITION OF SYNTAX

Purpose: To study the acquisition of syntax.
Subjects: 5 children between ages of 1.5 and 4 years are involved in long-term study; larger numbers are involved in short-term experiments.
Methods: Samples of child's speech are collected over a long period of time. Radio transmission and a concealed tape recorder are used. Parents are not aware of time of recording. Experiments with young children are performed by manipulating syntactic structure of utterances and analysis of the relationship of various syntactic formats to such responses as imitation, etc.
Duration: September 1963-September 1966.
Investigator(s): Harold A. Rashkis, M.D., Ph.D., Director, Clinical Research, and Lila R. Gleitman, M.A., Eastern Pennsylvania Psychiatric Institute, Henry Ave. and Abbottsford Rd., Philadelphia, Pa.
Cooperating group(s): Pennsylvania State Department of Public Welfare; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To appear in linguistic and psychological literature.

18-E-4 BEHAVIORAL CORRELATES OF INFANT VOCALIZATIONS

Purpose: To utilize recent methods of linguistic analysis in a longitudinal study of development of vocal characteristics in infants; to investigate later behavioral correlates (speech and intellectual performance) of these vocalizations. Specifically: to adapt methods of linguistic analysis to study of infant vocal development; to measure relationship between pre-linguistic vocalizations and later speech; and to determine feasibility of using infant vocalizations as a predictor of later intellectual level.
Subjects: 50 infants, followed from 1 to 36 months of age.
Methods: Spontaneous vocalizations of subjects will be tape recorded in half hour sessions at monthly intervals (at biweekly intervals during "babbling" stage), beginning with infants at age of 1 month and continuing to 18 months. Changes with age of various linguistic and vocal measures will be assessed; infant vocal characteristics will be correlated with vocabulary measures at ages 18 and 36 months, with results of a speech evaluation obtained at 36 months. Vocal characteristics will be correlated with Stanford-Binet I.Q. obtained at 36 months.
Duration: January 1964-December 1967.
Investigator(s): Egan A. Ringwall, Ph.D., Associate Professor, Hayne W. Reese, Ph.D., Associate Professor, and Norman N. Markel, Ph.D., Assistant Professor, Department of Psychology, State University of New York at Buffalo, Buffalo, N. Y.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-E-5 PHYSIOLOGICAL STUDIES, INCLUDING SOUND SPECTROGRAPHY, OF INFANT VOCALIZATION

Duration: 1961-indefinite.
Investigator(s): James F. Bosma, M.D., Chief, Oral and Pharyngeal Development Section, National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

Learning

18-F-1 LABORATORY INVESTIGATIONS OF DISCRIMINATION SKILLS UNDERLYING ASPECTS OF HUMAN LEARNING

Purpose: To develop methods of measuring various aspects of visual and auditory perceptual processes; to measure functions which underly all perceptual discrimination (e.g., activation and attentional processes); to experiment with and develop specific alphabet pre-reading techniques.
Subjects: Children, 4 and 5 years old, from socially disadvantaged backgrounds enrolled in Harlem public schools.
Methods: A battery of auditory and visual tests will be developed and administered to a sample of lower class children. A variety of separate studies will be carried out using alphabet boards and the Edison Responsive Environments Typewriter to develop and contrast training using their different types of equipment.
Duration: July 1964-June 1967.
Investigator(s): Cynthia P. Deutsch, Ph.D., Associate Professor, and Larry Gotkin, Ed.D., Senior Research Associate, Institute for Developmental Studies, Department of Psychiatry, New York Medical College, New York 29, N. Y. (Reported by Fay Boulware, Administrative Coordinator, Institute for Developmental Studies.)

18-F-2 DEVELOPMENTAL STUDIES OF DISCRIMINATION LEARNING

Purpose: To investigate level of performance on simultaneous and successive discrimination learning problems of elementary school children; to investigate effect of type of reinforcement on performance; and to investigate role of distance between stimulus and response loci on learning.
Subjects: Elementary school children, kindergarten through grade six.
Methods: Factorial design, involving three stimulus simultaneous and successive discrimination learning problems under one of four reinforcement conditions, and under one of three distance relationships. Reinforcement conditions are "right", "wrong", "right" and "wrong" and buzzer indicating right response. Distances between stimuli and response loci are 6", 3", and 0".
Duration: October 1963-August 1964.
Investigator(s): Frances Degen Horowitz, Ph.D., Associate Professor and Research Associate, Bureau of Child Research, University of Kansas, Lawrence, Kans.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication is planned.

18-F-3 INFANT LEARNING AND PATTERNS OF FAMILY CARE

Purpose: To study longitudinally 100 children from birth to three years of

age, using laboratory learning procedures as major dependent variables and various types of physical and interpersonal family attributes as major independent variables. In addition, the effects of a carefully programmed group care environment will be observed. Major concern is with maximization of intellectual potential and with determination of the most effective time for offering environmental enrichment programs.
Subjects: 100 children, approximately half of whom will be from lower socioeconomic status families and half of whom will be from "potential" middle class families currently living under conditions of economic privation.
Methods: (1) Measurement of learning patterns of the children by means of traditional laboratory learning techniques; (2) measurement of developmental level by published tests and experimental procedures; (3) assessment of stimulation potential of the home via repeated home visits; (4) assessment of parental attitudes toward learning and parental ideas of how children learn and how they can be taught; (5) assessment of nature of emotional relationship that develops between mother and infant; and (6) design of a program of day care for children in the study whose mothers will go to work and seek substitute care for their children.
Duration: April 1963-1969.
Investigator(s): Bettye M. Caldwell, Ph.D., Research Associate, and Julius B. Richmond, M.D., Chairman, Department of Pediatrics, Upstate Medical Center, State University of New York, Syracuse, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be published in regular scientific and professional journals.

18-F-4 THE RELATION OF CHARACTER TO LEARNING IN THE FIRST SIX SCHOOL YEARS

Purpose: To study the effect of character development on learning.
Subjects: 12 children at the Frankford Friends School.
Methods: Subjects studied serially for six years by a psychologist, a psychiatrist, and teachers. Standard tests were compared over six years to evaluate factors affecting learning (i.e., teacher attitudes and family trauma). Behavioral observations of character were made.
Findings: I.Q. was found to be significantly variable and to show a marked increase from the first to the sixth grades. Compulsive defenses often aided learning in children who had previously been unable to cope with their anxiety. Character tends to remain stable and is not affected by different teachers; learning patterns in boys and in girls differ.
Duration: 1957-1965.
Investigator(s): Theodore B. Cohen, M.D., Consulting School Psychiatrist, Margaret P. Morgan, School Psychologist, and Reba S. Lammey, B.S., Principal, Frankford Friends School, Penn and Orthodox Sts., Philadelphia, Pa.
Publication: Probably publication in Archives of Psychiatry, 1965.

18-F-5 LEARNING STRUCTURES AND PUPIL CHARACTERISTICS

Purpose: To determine various pupil characteristics as they relate to learning structures.
Subjects: Students in grades 7, 8, and 9.
Duration: July 1964-June 1967.
Investigator(s): Marvin D. Glock, Ph.D., Professor of Educational Psychology, School of Education, Cornell University, Ithaca, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-F-6 VALIDATION OF DATA ON COGNITIVE VISUAL FEEDBACK

Purpose: To re-analyze data on teacher perception of cognitive visual feedback from students.
Methods: Content analysis of visual records (films) of high school student learning; comparison with previously secured ratings by teachers; multiple regression analyses of teacher coding previously secured.
Duration: June-October 1964.
Investigator(s): Nathan Maccoby, Ph.D., Professor of Mass Communication, and Henry Breitrose, M.A., Instructor in Communication and Research Associate, Institute for Communication Research, Stanford University, Stanford, Calif.; J. Jecker, Ph.D., Assistant Professor of Psychology, University of Texas, Austin, Tex.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: "Sound Film Recordings in Improving Classroom Communication - Experiments in Non-Verbal Communication," Institute for Communication Research, Stanford University.

Intelligence, thought, and problem solving

18-G-1 LONGITUDINAL CHANGES IN I.Q. AS MEASURED BY THE CALIFORNIA SHORT-FORM TEST OF MENTAL MATURITY

Purpose: To investigate deviations in I.Q. scores which occur in the elementary school.
Subjects: 156 boys and 158 girls in public elementary school.
Methods: Subjects were initially tested in the third grade using the California Short-Form Test of Mental Maturity '50 S Form. They were subsequently tested at two-year intervals as fifth and seventh grade pupils. Difference scores, both group and individual, are being investigated.
Findings: Preliminary findings indicate wide fluctuations in individual I.Q. scores beyond that explanable by measurement error.
Duration: September 1963-spring 1965.
Investigator(s): Carmen J. Finley, Ph.D., Director of Research, and Jack M. Thompson, M.A., Director of Guidance, Sonoma County Schools, 2555 Mendocino Ave., Santa Rosa, Calif.
Publication: To be submitted for publication when completed.

18-G-2 FACTORS RELATED TO CHANGE IN MENTAL TEST PERFORMANCE

Purpose: To identify demographic and familial factors related to increase or decrease in I.Q. from 6 to 12 and from 12 to 17 years of age.
Subjects: 500 subjects from 5 longitudinal studies (Berkeley Growth, Berkeley Guidance, Oakland Growth, Child Research Council-Denver, and Fels Research Institute), the data for whom are combinable for variables studied.
Methods: Basically correlational, using analysis of variance and Chi-square to determine relationships between I.Q. change and background characteristics.
Duration: October 1962-October 1965.
Investigator(s): Ann Haeberle, Ph.D., Assistant Professor, Brooklyn College, Francis H. Palmer, Ph.D., Professor, Graduate School, City University of New York, New York, N. Y., and Jerome Kagan, Ph.D., Chairman, Department of Psychology, Fels Research Institute, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Probably a monograph, possible a book, and articles in professional journals.

18-G-3 A FACTOR ANALYTIC COMPARISON OF THE PERFORMANCE OF NORMALS AND RETARDATES ON THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Purpose: To add further confirmatory evidence to the theory that there are qualitative differences in the structure of abilities between normals and retardates and to identify, compare, and contrast these abilities by means of factor analysis.
Subjects: Data from approximately 150 subjects on 11 subtests in the WISC (Wechsler, 1949) will be selected from the Human Genetics Longitudinal Study of Intelligence (Osborne, 1963) to comprise a normal group. Similar data for a retarded group will be selected from Ainsworth's study (1960). Both groups will be matched for sex and Wechsler Test Age.
Methods: In order to yield more variables and therefore larger correlation matrices, the 11 subtests will be split according to a method proposed by Saunders (1959), thus providing a method capable of yielding as many dimensions as there are subtests, but that does not force this result. Matrices will be factor analyzed by a method proposed by Kaiser (1959), which permits two important criteria, i.e., simple structure and factorial invariance. Factor structure of the two groups will be analyzed to further identify and describe intellectual factors of normals and retardates.
Investigator(s): R. Travis Osborne, Ph.D., Professor of Psychology, and Lance Hemberger, University of Georgia, Athens, Ga.

18-G-4 A FACTORIAL STUDY OF THE DIMENSIONALITY OF INTELLIGENCE TEST PERFORMANCE OF CHILDREN AS A FUNCTION OF SUBCULTURE AND SEX: A LONGITUDINAL STUDY

Purpose: To determine stability of intellectual factors in same group of subjects as a function of maturation from preschool age through third grade; to relate the Development Hypothesis of Intelligence as proposed by Garret (1946), to intelligence test performance of subgroups classified by sex and subculture.
Subjects: Subjects represent all available members of a stratified random group who were originally tested at preschool level in 1961 and who were retested in spring of 1962. Group available for retesting in spring of 1964 has an approximately equal distribution of white and Negro subjects; representation by sex is approximately equal.
Methods: Wechsler Intelligence Scale for Children was primary instrument. Data factor analyzed using varimax criterion for rotation developed by Kaiser. In addition to analysis performed on total group, separate analyses are performed on subgroups classified by sex and then by subculture. Congruence correlations are computed between separate matrices and also between 1964 analyses and those made on data from previous testings.
Duration: 1961-1965.
Investigator(s): R. Travis Osborne, Ph.D., Professor of Psychology, and Jim Lindsey, University of Georgia, Athens, Ga.

18-G-5 INTELLIGENCE AND PERSONALITY OF INDIAN CHILDREN

Purpose: To obtain data useful in guidance of Indian children.
Methods: Psychological testing; adapted WISC.
Findings: Verbal intelligence superior by about 10 percent over U.S. children and performance about 6 percent below U.S. children.
Duration: June 1961-January 1965.
Investigator(s): Rev. Arthur J. Malin (Ph.D. Candidate), Director of Guidance, St. Francis de Sales College, Kamptee Rd., Nagpur, India.

18-G-6 DEFINITION OF CURIOSITY

Purpose: Exploratory study designed to seek a better definition of curiosity of elementary school children than the one currently used.
Subjects: Children in grade 5 attending public schools in New Castle County; and divided into groups of high and low curiosity.
Methods: Factor analysis using Eysenck approach.
Duration: June 1964-May 1965.
Investigator(s): Wallace H. Maw, Ed.D., Associate Professor of Education, University of Delaware, Newark, Del.
Cooperating group(s): U. S. Department of Health, Education, and Welfare.
Publication: Final results to be published in educational and psychological journals.

18-G-7 AN EXPERIMENTAL STUDY OF A METHOD FOR DEVELOPING CREATIVE THINKING ABILITY IN FIFTH GRADE CHILDREN

Purpose: To determine if teachers can foster creativity in their pupils when given training in applying certain principles; to determine the feasibility of using mobile television equipment and audio-video tapes in larger studies similar to present one.
Subjects: 102 fifth grade students from four schools and their teachers. Two teachers and their students served as experimental group; two teachers and their pupils served as controls.
Methods: Two television cameras and microphones were placed in experimental classrooms and tapes were made of classes during day. These were later observed by teacher and investigator to note instances in which principles thought to foster creativity were used. Teacher training conferences were held, based on content of tapes. Pre- and post-tests were administered to pupils and teachers.
Duration: February-August 1964.
Investigator(s): Paul D. Enochs, Ph.D. Candidate, Department of Educational Psychology, University of Missouri, Columbia, Mo.
Publication: Doctoral dissertation, University of Missouri.

18-G-8 TEACHING STRATEGIES AND COGNITIVE FUNCTIONING IN ELEMENTARY SCHOOL CHILDREN

Purpose: To test the hypothesis that if curriculum and teaching strategies emphasize the development of cognitive skills, sophistication in thinking will be produced earlier and for more types of students than is indicated by studies of development of thinking. Specifically, to examine systematically the development of thinking under differing lengths of exposure to the cognition-oriented curriculum especially designed for teaching strategies. To redevelop and refine the three criterion measures: two tests on thinking (inference and application of principles) and a method of classifying classroom transactions on three cognitive tasks (grouping and classifying, drawing inferences from interpreting data, and applying principles in explaining new phenomena or predicting consequences from described conditions).
Methods: Independent analyses of effects of exposure to curriculum, to teaching strategies, and of teacher training. Attempt will be made to adapt for testing purposes a teaching machine with facilities for audiovisual presentation of situations and for recording the steps used in reaching answers. An effort will also be made to develop a system of classifying classroom transactions.
Duration: February 1964-January 1966.
Investigator(s): Hilda Taba, Ph.D., Professor of Education, and Samuel Levine, Ph.D., Associate Professor of Education, San Francisco State College, San Francisco, Calif.

Cooperating group(s): Cooperative Research Branch, Office of Education, U. S. Department of Health, Education, and Welfare.

18-G-9 YOUNG CHILDREN'S THINKING: UNDERSTANDING OF THE PRINCIPLE OF "CONSERVATION"

Purpose: To explore the educational significance of the principle of "conservation," using methods derived from the work of Piaget.
Subjects: 335 children, 5, 6, and 7 years old, drawn from kindergarten and grades 1 and 2 in New York City schools located in differing socio-economic neighborhoods.
Methods: Interviews with individual children; kindergarten children re-interviewed at six-month intervals over a three-year period.
Duration: September 1961-January 1965.
Investigator(s): Millie Almy, Ph.D., Research Associate, Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University, New York, N. Y., and Edward Chittenden, Ph.D., Mount Holyoke College, South Hadley, Mass.
Publication: Monograph, Teachers College Bureau of Publications.

18-G-10 THE ACCURACY OF CHILDREN'S JUDGMENTS OF THE PLAYING ABILITIES OF THEIR PEERS IN GRADES ONE THROUGH SIX

Subjects: 289 children enrolled in grades 1 through 6 in the Thomas Metcalf Laboratory School of Illinois State University, the first semester of the school year 1962-63.
Methods: Relationships of objective scores on tests of three basic skills (running, throwing, and jumping) with children's judgments of the same skills, and with choices of teammates based on skill, were measured. An extension of this involved measuring the relationships of choices of friends based on a class, social, or work situation with the choices of teammates based on skill, in order to discover the influences of friendship choices on teammate choices. Moreno-type functional choice sociometric questionnaires were employed to obtain the above information.
Findings: Judgments of children regarding the qualities of playing ability of their peers were found to be reliable at all grade levels. Judgments of the throw and jump were significantly accurate as early as second grade, of the run at third grade. There was no one grade level where the judgment of playing skill became accurate, as there was variability in the grade level at which judgments were statistically significant for each skill measured. There was evidence that in choosing teammates based on skills, the children at all grade levels made significantly accurate judgments in relation to the objective skill measures. There was no statistically significant relationship between choices of friends and choice of teammates.
Duration: November 1962-June 1963.
Investigator(s): Evelyn L. Schurr, Ph.D., Assistant Professor of Health and Physical Education, Illinois State University, Normal, Ill. (Reported by Paul Dohrmann, Ph.D., Assistant Professor of Health and Physical Education, Illinois State University.)
Publication: University Microfilms.

18-G-11 VARIABLES AFFECTING GUESSING BEHAVIOR IN CHILDREN

Purpose: To study the effect of redundant information upon hypothesis formation in normal and retarded children.
Subjects: Normals, retarded noninstitutionalized, and retarded institutionalized children.

Methods: Manipulation of amount of information available to assess child's degree in guessing behavior (hypothesis formation).
Duration: October 1963-September 1964.
Investigator(s): Allan G. Barclay, Ph.D., Chief Psychologist, Department of Pediatrics, Cardinal Glennon Memorial Hospital for Children, St. Louis University, St. Louis, Mo.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to Child Development and Journal of Experimental Psychology.

18-G-12 FACTORS AFFECTING INDUCTIVE REASONING

Purpose: (1) To investigate the ability of children of various ages to form concepts on the basis of different types of sequences of instances; and (2) to investigate the effects of problem complexity on strategies used in solving inductive reasoning problems.
Methods: An attempt will be made to establish whether dependence on type of sequence presented is more marked with younger than with older children, and then, to determine extent to which training could overcome such difficulties in concept formation. An initial attempt will be made to locate aspects of problem complexity having important effects on strategies, and then, to explore these in some detail.
Duration: 1962-1965.
Investigator(s): Janellen Huttenlocher, Ph.D., Center for Cognitive Studies, Harvard University, Cambridge 38, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-G-13 CHOICE OF GOAL-OBJECT IN RELATION TO CHILD'S ABILITY TO SOLVE PROBLEMS REQUIRING USE OF THE PRINCIPLE OF TRANSITIVE INFERENCE

Purpose: To test the hypothesis that a child's ability to make transitive inferences generalizes over problems in which the goal-object and/or the perceptual elements of the problem vary.
Subjects: 24 boys and 24 girls of modal intelligence, grades 2, 3, and 4 of the P. K. Yonge Laboratory School, University of Florida.
Methods: Each subject was presented with problems in ordinal ranking and deductive reasoning. Solution of all problems required use of transitive relationships. Intra-individual differences in pattern of correct and incorrect solutions were analyzed to see if some goal objects and perceptual elements were significantly and consistently more difficult than others. Both parametric and nonparametric tests of significance were used.
Findings: (1) Problems of both a ranking and reasoning nature were significantly more difficult when goal-object concerned psychological rather than physical relationships; (2) reasoning problems were significantly more difficult than ranking problems, no matter what the goal-object; and (3) perceptual variation in the elements of a problem do not significantly affect the difficulty of the problem.
Duration: April-August 1964.
Investigator(s): James F. Doyle, M.A., and Ira J. Gordon, Ed.D., Professor of Education, University of Florida, Gainesville, Fla.
Publication: To be submitted to Child Development.

18-G-14 PROBLEM-SOLVING BEHAVIOR IN CHILDREN

Purpose: (1) To develop methods that are coordinated with a S-R pretheoretical model which extends learning principles to encompass problem solving; (2) to apply those methods to children of different ages and to different species in order to observe changes that occur with ontogenetic and phylogenetic development; and (3) to determine by experimental manipulation the variables that influence this development.
Subjects: Children, 4 to 10 years of age.
Methods: Simple concept utilization task and inferential reasoning problems.
Findings: A mediational mechanism develops with increasing mental age that reverses the tendency, apparent in animals and children below 6, to execute a nonreversal shift more rapidly than a reversal shift. This development seems to be related to the use of language, as indicated by both developmental and experimental data.
Duration: August 1963-August 1966.
Investigator(s): Howard H. Kendler, Ph.D., Professor of Psychology, and Tracy S. Kendler, Ph.D., Research Psychologist, University of California, Santa Barbara, Calif.
Publication: Psychological Review, 69:1-16, 1962; American Journal of Psychology, 75:571-586, 1962; and others.

18-G-15 PROBLEM-SOLVING CAPABILITIES AND TENDENCIES OF SECOND GRADE CHILDREN

Purpose: To ascertain the diversity of thinking and methods of attack used by second grade children in solving selected word problems.
Subjects: 20 second grade children--10 boys and 10 girls, median age 93 months, mean I.Q. 112, and of predominantly low socio-economic status.
Methods: 10 verbal problems, involving both new and familiar concepts were individually administered to each child in random order in an interview situation. Materials available for use by pupils included single counters, counters in groups of 10, pencils, and paper. Problems were read aloud by interviewer, and child was asked to solve problem in any way he could, using aids if necessary. Child was encouraged to think aloud; notes were kept on visible methods of attack, and if answer was given orally, child was asked to explain method of solution. Information was kept on an open checklist and later analyzed for similar and diversified methods.
Findings: There were no generally consistent methods nor application of facts.
Duration: Spring 1963-spring 1964.
Investigator(s): Elisabeth Armstrong, M.S., Elementary School Teacher, and Harold H. Lerch, Ed.D., Assistant Professor of Education and Mathematics, Southern Illinois University, Carbondale, Ill. (Reported by Robert Karlin, Professor of Education and Director, Reading Center, Southern Illinois University.)
Publication: To be submitted to a professional education journal.

18-G-16 PROBLEM-SOLVING TECHNIQUES OF CHILDREN IN GRADES FOUR THROUGH NINE

Purpose: Cognitive process study to determine amenability of children's skills to change through teaching techniques, transfer of problem-solving skills to academic area, and differences between good and poor problem solvers.
Subjects: 480 students; of the 80 in each grade, 40 are able problem solvers, 40 are poor.
Duration: June 1964-August 1965.
Investigator(s): M. Ray Loree, Ph.D., Professor of Educational Psychology, and Kenneth M. Parsley, Jr., Ph.D., Associate Professor of Educational Psychology, University of Alabama, University, Ala.
Cooperating group(s): Tuscaloosa City and County Schools; Cooperative Research

Branch, Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be published in professional journals.

18-G-17 RIGIDITY IN CHILDREN'S PROBLEM SOLVING WITH ESPECIAL ATTENTION TO THE EINSTELLUNG PHENOMENON

Purpose: To identify some correlates of Einstellung Rigidity in children.
Subjects: Approximately 500 children, 5 through 12 years old.
Methods: A water jar test, alphabet maze, and perceptual test were administered under standard, speed, and stress conditions to both experimental and control subjects. In addition, water jar test was given to a small group with actual water and water containers. Results were analyzed in terms of age, sex, and I.Q.
Findings: There were nonsignificant trends for males, older, and brighter children to be less susceptible to set than females, younger children, and those of low intelligence. Although in most cases trend was in predicted direction, there was no significant difference between males and females in ability to overcome set. Hypothesis of a direct relationship between intelligence and ability to overcome set was cautiously accepted. Ambiguous results were obtained for age relationships in ability to overcome set, although most distributions were in predicted direction. A significant direct relationship was found between number of critical problems solved by direct method and ability to overcome set. Stress, as induced by the nine-dot problem, generally led to significantly more rigid behavior than did standard test administration. Speed scores were not significantly different from standard scores. Use of actual water containers did not lead to significantly less rigid behavior than did paper-and-pencil water jar test, although scores were in that direction.
Duration: June 1963-September 1964.
Investigator(s): John D. Cunningham, Ed.D., Science Curriculum Improvement Study, University of California, Berkeley 4, Calif.
Publication: To be published in journals.

Social behavior

18-H-1 THE EFFECTIVE COMMUNITY OF THE ADOLESCENT

Purpose: To map and describe in detail the effective community for all male adolescents in a single geographic area, "effective community" referring to that complex of persons and settings with which a given individual is in effective contact. To analyze associational networks with attention to implications for socialization and adult role development. To develop a methodology for studying community associational patterns in any population so that a body of comparable data on differing communities can be built up. General hypothesis is that range of settings and persons making up community of first-hand experience differs significantly for adolescents differing in important social characteristics such as age, social status, school standing, and relation to legal norms.
Subjects: All male adolescents, 14 to 19 years old, living in an all Negro, largely lower-class area near Washington, D. C.
Methods: Individuals' community networks are identified through collection of "itineraries" from all subjects for a seven-day time sample. Common patterns of association are identified by factor analysis of itinerary data. Data on inhabitants, characteristic behavior patterns, roles, and role incumbents in behavior settings composing community networks or "ego-communities" are collected through observation and interview. Most data collection is carried out by staff of indigenous adolescents serving as research assistants, in whom

"team spirit" and interest are built and nurtured through "detached work" techniques and by fostering a sense of group identity and prestige.
Duration: 1963-not reported.
Investigator(s): Derek V. Roemer (Ph.D. Candidate), Adolescent Process Section, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md.

18-H-2 EAU CLAIRE COUNTY YOUTH STUDY - PHASE II

Purpose: To carry out further analyses of home background, family interaction, and psychological assessments for children who were nominated by their teachers as consistently displaying socially approved or disapproved behavior, and who were studied previously in a project completed in May 1964 (Bulletin 14, Research Relating to Children).
Subjects: A total of 384 children divided equally by sex, behavior according to teacher nominations, grade level (3, 6, or 9), and home location (urban or rural).
Methods: Subjects and their parents were studied intensively by trained interviewers who administered psychological tests, conducted family interviews, and rated family members on Glueck and other scales.
Findings: Significant differentiations on home and family variables, I.Q., school achievement, health, police records, and on some psychological tests have been found.
Duration: May 1964-April 1965.
Investigator(s): John R. Thurston, Ph.D., Associate Professor of Psychology, Wisconsin State College, Eau Claire, Wis., and John F. Feldhusen, Ph.D., Associate Professor of Psychology, Purdue University, Lafayette, Ind.
Cooperating group(s): Division for Children and Youth, Wisconsin State Department of Public Welfare; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers presented at American Psychological Association, American Educational Research Association and other meetings; several publications are planned during 1964.

18-H-3 PSYCHOSOCIAL STUDY OF RURAL ADOLESCENTS

Purpose: To carry out second phase of a broad psychosocial study of adolescent behavior problems in rural and small urban communities, exploiting presently available data gathered concurrently with data necessary for a more limited sociological study of rural delinquency; to further develop a new group Rorschach technique administered to 1,050 rural and small city high school students.
Methods: Analysis of psychological test scores, school grades, I.Q.'s, and information concerning adolescent goals, norms, gratifications, frustrations, and overt behavior patterns in school, family, peer, and courtship roles, gathered in interviews, questionnaires, and field observation reports.
Duration: February 1963-August 1964.
Investigator(s): Jerome Himelhoch, Ph.D., Professor of Sociology, Goddard College, Plainfield, Vt.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-H-4 ADOLESCENT BEHAVIOR AND INTERESTS

Purpose: To measure orientations of adolescents toward either the adolescent or adult cultures.

Subjects: 268 boys and 210 girls from 26 public high schools throughout the country.
Methods: Questionnaire administered to subjects.
Findings: Most adolescents had consistent value orientations; the two orientations were uncorrelated rather than inversely related.
Duration: January 1963-September 1964.
Investigator(s): Milton H. Maier, Ph.D., Research Psychologist, and Scarvia B. Anderson, Ph.D., Assistant Director, Cooperative Test Division, Educational Testing Service, Princeton, N. J.
Cooperating group(s): College Entrance Examination Board; Office of Naval Research, Department of the Navy, U. S. Department of Defense.
Publication: A report will be issued as an Educational Testing Service Research Bulletin and will also appear in the professional literature.

18-H-5 THE SOCIAL SYSTEMS OF NEGRO AND WHITE ADOLESCENTS IN SEGREGATED AND INTERRACIAL HIGH SCHOOLS

Purpose: To study racial composition as a variable in the emergence of youth social systems.
Subjects: National sample of 30,000 high school seniors.
Methods: Paper and pencil survey questionnaire.
Duration: May 1964-September 1968.
Investigator(s): David Gottlieb, Ph.D., Associate Professor of Sociology, Michigan State University, East Lansing, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-H-6 DETERMINANTS OF RESPONSIVENESS TO SOCIAL STIMULI

Purpose: To relate parent child-rearing practices and teachers' ratings of social behaviors to laboratory measures of a child's responsiveness to social stimuli; also, to relate a child's autonomic arousal to his responsiveness to social stimuli and to his gross rate of motor output.
Subjects: Children, 4 to 10 years of age; social agents range from parents, peers, teachers, to neutral adults.
Methods: Social reinforcers are used in an operant conditioning situation to shape preference behaviors in a simple motor task. Laboratory tasks have also been constructed providing three situations in which child can imitate behavior of a model. Behaviors being manipulated in imitation tasks range from problem solving abilities (Porteus mazes), to rate of motor behaviors and preference for objects.
Findings: A child's responsiveness to social reinforcers is related to his responses in an imitation situation; the child's responsiveness to social reinforcers is related to the kind of child-rearing practices found in the home. The more responsive a child is to social reinforcers, the better adjusted his teacher and parents describe him. Mothers tend to be more "imitated" than do fathers for young boys.
Duration: 1963-1965.
Investigator(s): Gerald R. Patterson, Ph.D., Associate Professor of Psychology, and Richard Littman, Ph.D., Chairman, Department of Psychology, University of Oregon, Eugene, Oreg.
Publication: To be submitted for publication, December 1964.

18-H-7 AN EXPERIMENTAL ANALYSIS OF SOCIAL MOTIVATION

Purpose: To analyze and demonstrate effects of social reinforcement contin-

gencies involving teachers' attention on behavior of nursery school children; to effect permanent improvement in the children's behavior.
Subjects: Normal nursery school children, approximately 3 to 5 years of age, enrolled in University of Washington Laboratory Preschool.
Methods: Observational techniques; experimental manipulation of teachers' behavior in attending to or ignoring selected aspects of the child's behavior; objective scoring of behavior of teacher and child and of behavior change over period of time.
Findings: Teacher's attention frequently functions as a positive reinforcer, strengthening behaviors. Many undesirable kinds of behavior in preschool children can be extinguished by consistent nondelivery of attention when they occur.
Duration: September 1962-June 1968.
Investigator(s): Donald M. Baer, Ph.D., Associate Professor of Psychology, University of Washington, Seattle 5, Wash.

18-H-8 THE EFFECTIVENESS OF PEERS AS AGENTS OF SOCIAL REINFORCEMENT

Purpose: To isolate factors enhancing a child's effectiveness as a dispenser of social reinforcement for other children.
Subjects: Preschool and elementary school children.
Methods: Assessment of sociometric status of subjects and reinforcing agents by means of standard techniques; teacher ratings of aggression anxiety; observation and recording of response rate data in a simple, socially reinforced task when approval is delivered by a peer, and observation and recording of tangential dependent and hostile behavior.
Findings: Performance is better maintained when peer reinforcing agent is a disliked or unpopular peer than when the reinforcing agent is liked or popular. Children anxious about aggressive behavior of their peers perform better than children who are nonanxious about this form of interpersonal behavior. Perception of reinforcing agent as aggressive or nonaggressive, however, does not effect changes in response rates.
Duration: September 1963-September 1964.
Investigator(s): Willard W. Hartup, Ed.D., Associate Professor, Institute of Child Development, University of Minnesota, Minneapolis 14, Minn.
Publication: To be submitted to professional journals.

18-H-9 COMPARATIVE STUDY OF SANCTIONS ON PREMARITAL SEXUAL BEHAVIOR IN ADOLESCENCE

Purpose: To determine factors which affect permissive and nonpermissive behavior in the sexual sphere.
Methods: Data were drawn on 120 cultures controlled for geographical distribution from Human Relations Area Files. Cross-cultural methodology was employed as outlined by John W. M. Whiting in *Handbook of Social Psychology*.
Findings: Tentative findings to date: (1) permissiveness is significantly related to small tribes, matrilineal descent, matrilocal residence, and segregation of adolescents by sex at puberty; and (2) nonpermissiveness is related to large groups, complex social organization, patrilineality, and achieved rather than ascribed statuses.
Duration: Summer 1962-indefinite.
Investigator(s): George W. Goethals, Ed.D., Lecturer on Social Relations, and John W. M. Whiting, Ph.D., Professor of Social Anthropology, Harvard University, Cambridge 38, Mass.
Cooperating group(s): Milton Fund, Harvard University; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published as a monograph or an article, probably in *Journal of Social Psychology*.

18-H-10 SURVEY OF DRINKING PRACTICES AND ATTITUDES OF TEENAGERS

Purpose: To gather data on teenagers' drinking practices and attitudes toward drinking.
Subjects: 9000 students, grades 7 through 12.
Methods: Questionnaire.
Duration: January 1964-January 1966.
Investigator(s): Edward Blacker, Ph.D., Director, Division of Alcoholism, Massachusetts Department of Public Health; Harold Demone, Jr. (Ph.D. Candidate), Director, Medical Foundation, Boston, Mass., and Howard Freeman, Ph.D., Associate Professor, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Mass.
Cooperating group(s): Boston University Law Medicine Institute; Division of Alcoholism, Massachusetts Department of Public Health; national medical foundations.
Publication: To be published as a book and/or articles.

18-H-11 EXTINCTION OF THE CIGARETTE SMOKING HABIT IN ADOLESCENTS

Purpose: To evaluate the efficacy of a lecture series to aid in breaking smoking habit.
Subjects: Approximately 140 subjects and controls from 3 public and 1 parochial high schools.
Methods: Five weekly lectures and group discussions in each school, with follow-up planned for three months, six months, and one year.
Duration: March 1964-June 1965.
Investigator(s): Dan C. Overlade, Ph.D., Director, Escambia County Guidance Clinic, Inc., P.O. Box 1869, Pensacola, Fla.
Publication: To be submitted for journal publication.

18-H-12 GROUP ADVISOR BEHAVIOR, GROUP LEADERSHIP STYLE, AND RATING OF LEAST PREFERRED CO-WORKER

Purpose: To determine effectiveness of group process in relation to type of group leadership assigned in achievement of agency and group goals.
Subjects: 10 clubs made up of junior high school boys and girls, ages 12 to 14 years.
Methods: Use of observers, LPC tests, and Bales Interaction Process Analysis Scores.
Duration: September 1963-July 1964.
Investigator(s): Thurlow R. Wilson, Ph.D., Department of Psychology, and Jack Rubenstein, M.S.W., School of Social Work, University of Pittsburgh, Pittsburgh, Pa. (Reported by Dr. Arnold J. Auerbach, Executive Director, YM and WHA-IKC, 315 S. Bellefield Ave., Pittsburgh 13, Pa.)
Cooperating group(s): Pittsburgh Foundation.

PERSONALITY AND ADJUSTMENT

Assessment of personality

18-J-1 DEVELOPMENT OF PICTORIAL SEMANTIC SCALES

Purpose: To determine whether pictorial versions of semantic scales can be used reliably by children; to determine whether ratings by children on these scales relate consistently to other indices of meaning; specifically, whether pictorial ratings of concepts referring to behavioral acts bear any relationship to performance of acts referred to.
Subjects: 60 third grade children, and 55 first grade children. It is proposed scales be tried with mentally retarded and emotionally disturbed subjects.
Methods: Thus far, subjects have been administered 10 pictorial scales, each consisting of a series of five cartoon-like drawings varying sequentially in some attribute (e.g., one scale consists of boy's face which ranges in expression from forlorn frown through neutral point to a broad grin). Subject is asked which panel on scale fits best with concept in question. Concepts tried thus far include two sex-typed activities, two sex role labels, and one classroom behavior ("ask the teacher for help").
Findings: Third grade subjects made significantly different associations to male and female activities and to sex role labels on majority of scales. Four scales, when used to rate "asking the teacher for help," differentiated those children rated by teacher as actually high and low on help-seeking. First graders were less reliable on test-retest but showed same pattern of results.
Duration: Spring 1961-indefinite.
Investigator(s): Malcolm M. Helper, Ph.D., Associate Professor of Medical Psychology, College of Medicine, University of Nebraska, Omaha, Nebr.
Cooperating group(s): Foundations Fund for Research in Psychiatry.
Publication: To be submitted to Child Development.

18-J-2 INKBLOT PERCEPTION AND PERSONALITY

Purpose: Major emphasis will be given to second year of a six-year longitudinal study of developmental aspects of perception, personality, and related cognitive functioning in children. An overlapping design has been employed to study a twelve-year developmental span in only six calendar years. In addition, research will continue on validation and refinement of Holtzman Inkblot Technique.
Subjects: 420 children from 3 different grade levels, 3 years apart.
Methods: Data on HIT, as well as a number of cognitive, perceptual, and personality tests, have been obtained during first year on groups of first, fourth, and seventh grade children. Repeated measurements will be made each year, with specific content of test batteries varying from year to year except for a small continuing core.
Duration: Not reported-1969.
Investigator(s): Wayne H. Holtzman, Ph.D., Professor of Psychology, and Joseph S. Thorpe, Ph.D., Assistant Professor of Psychology, University of Texas, Austin 12, Tex.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-J-3 COMPARISON OF RORSCHACH RESPONSES OF SEVERAL GROUPS OF FIVE TO TEN YEAR OLDS

Subjects: Three groups of white, 5 to 10 year old children from different socio-economic and intellectual levels: (1) New Haven group - 50 boys and 50 girls at each age level of 5 through 10 years, mean I.Q. 118, parents in groups I and II on Minnesota Scale; (2) Weston group - approximately 25 subjects at ages 5, 5 1/2, 6, 7, 8, 9, and 10, mean I.Q. 111, mostly from professional and semiprofessional families; and (3) North Haven group - 50 boys and 50 girls at each age level 5, 5 1/2, 6, 7, 8, 9, and 10, mean I.Q. 107, most parents from levels II and III on Minnesota Scale.
Methods: Rorschachs given, scored, norms determined for all scoring variables.
Findings: For the most part, subjects with higher I.Q's and of higher SES gave "better" Rorschach responses, i.e., higher R, lower W and F percent, higher F+ percent, etc.
Investigator(s): Louise Bates Ames, Ph.D., Director of Research, Gesell Institute of Child Development, New Haven, Conn.
Cooperating group(s): Fund for the Advancement of Education, Ford Foundation.
Publication: Publication as a Genetic Psychology monograph is anticipated.

18-J-4 CHILDREN'S DRAWINGS AS INDICATORS OF SEXUAL DISCRIMINATION

Purpose: Poor performance on children's drawing tests may be to a great extent a function of the broader problem of an inability or severe limitation in depicting a well developed human figure. This study will: (1) test the assumption that drawings can give accurate assessments of a child's sexual identification; (2) determine whether sexual discrimination in drawings is a function of chronological age and maturational level; and (3) examine drawings as a response measure.
Subjects: 70 boys, aged 5.5 to 7.5 years, of average or superior intelligence. Subjects attend the Ethical Culture Schools, and come from middle and upper middle class backgrounds with high cultural standards.
Methods: Two initial measures of visual-motor skill and ability to do representational drawings are used. One task involves drawings of two transportation objects; the other involves standard "draw-a-person" and "person of opposite sex". DAP pair will indicate general ability to draw human figure and also will serve as an initial measure of sexual discrimination in drawings. Stories in which masculinity will either be reinforced or attacked will then be read to subjects, who will be asked to draw principal male and female characters in each story and to verbally express their awareness of story's point. Experienced judges will be employed to rate all of the drawings and verbal material obtained.
Duration: 1958-1964.
Investigator(s): Leah Levinger (Ph.D. Candidate, New York University), Guidance Coordinator and Chief Psychologist, Ethical Culture Schools, 33 Central Park West, New York, N. Y.
Publication: Will probably be submitted for journal publication.

18-J-5 COMPARISON OF BEHAVIOR JOURNALS AND GRAPHOANALYSIS

Purpose: To compare the characteristics of behavior found in child study records and analysis of children's handwriting.
Methods: 200 child study records are compiled by various teachers over a period of four and one half months. Three samples of each child's handwriting are analyzed by a certified graphoanalyst. The summary of the child study record, including patterns and classification of incidents is compared by researcher to the handwriting analysis.
Findings: There is an amazing consistency between an analysis of handwriting and child study summary statements. Since handwriting analysis can be a more

rapid process than child study, and yet produce at least some of the same results and conclusions, it is reasonable that there is the possibility of the techniques being used either together or independently to assist teachers.
Duration: February 1964-January 1966.
Investigator(s): Lewis R. Fisher, D.Ed., Professor of Education, Texas College of Arts and Industries, Kingsville, and Ruth E. Fisher, M.S., Teacher, Bishop Public Schools, Bishop, Tex.
Cooperating group(s): State of Texas.
Publication: Articles to be submitted to periodicals.

Processes and factors in personality

18-K-1 A STUDY OF EGO DEVELOPMENT FROM BIRTH

Purpose: To investigate the mechanisms of ego formation which arise from inherent apparatuses of primary autonomy spoken of by Hartmann and Rapaport and those ego structures which emerge out of psychic conflict.
Subjects: Follow-up of infants already studied intensively in infancy plus new subjects to be studied more intensively with regard to variables suggested.
Methods: Direct observation of ongoing development, mother-infant interaction, response to standard stimulation, changes in state, capacity to maintain state of alert inactivity, and constitutional differences in reflex behavior. Mother-infant interaction will be analyzed in terms of average expectable caring practices, and spontaneous stimulation. Comparison will be made with respect to specific responses in controlled interaction situations.
Duration: May 1963-indefinite.
Investigator(s): Justin D. Call, M.D., Associate Professor of Psychiatry, Alfred Goldberg, M.D., Assistant Research Psychiatrist, and Marianne Marshack, Ph.D., Research Psychologist, School of Medicine, University of California, Los Angeles 24, Calif.
Cooperating group(s): Los Angeles Institute for Psychoanalysis.
Publication: Material to be published as available and appropriate at various stages during study.

18-K-2 STUDIES OF EGO DEVELOPMENT

Purpose: To study systematically the rate and pattern of specific components of ego development; to relate individual differences to interaction effects among specified intrinsic and extrinsic variables.
Subjects: Cross-sectional sample consists of approximately 400 infants up to 24 months of age, used for validation of scales and assessment procedures; longitudinal sample includes 16 infants from birth to 2 years of age.
Methods: Periodic measurements and assessment of infant development scales (Guttman type) dealing with precursors of cognition, communication, imitation and similar dimensions; periodic assessment of patterns, mother-child interaction, and infant behavior in life situations, supplemented by clinical descriptive study using interviews, observations, and photography of children and families.
Duration: September 1964-August 1971.
Investigator(s): Sibylle K. Escalona, Ph.D., Professor of Psychology, and Harvey H. Corman, M.D., Associate Clinical Professor of Psychiatry, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.

18-K-3 STUDIES IN EGO DEVELOPMENT: THOUGHT AND MOTILITY

Purpose: To study early stages in development of interests, defenses, and adaptive failures, particularly in relationship to general cognitive and motor behavior patterns of the child.
Subjects: 15 4-year old boys and 15 8-year old boys and their mothers; additional groups to be seen.
Methods: Variety of specially designed assessment techniques including ability tests, problem solving tasks, playroom observations, stress situations, and interviews.
Duration: September 1962-indefinite.
Investigator(s): Fred Pine, Ph.D., Associate Professor, Psychology Laboratory, Department of Psychiatry, Downstate Medical Center, State University of New York, 450 Clarkson Ave., Brooklyn 3, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-K-4 ROLE OF NEONATAL CHARACTERISTICS IN LATER DEVELOPMENT

Purpose: To study antecedents of a variety of ego functions and defenses. (See also pilot project reported in Bulletin 16, Research Relating to Children.)
Subjects: 40 normal neonates, full-term, normally delivered.
Methods: Observations and sensory stimulation experiments designed to yield information on nine neonatal variables, all of which involve response to internal and external stimuli.
Duration: May 1964-May 1967.
Investigator(s): Anneliese F. Korner, Ph.D., Research Associate, Department of Psychiatry, Stanford University School of Medicine, Palo Alto, Calif.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper on preliminary work leading to this study now in press as part of Psychoanalytic Study of the Child.

18-K-5 INDICATORS OF DEVELOPMENTAL CHANGE IN LOWER CLASS CHILDREN

Purpose: To develop theory-relevant personality measures appropriate for lower class children of junior high school age in order to investigate personality development with special reference to the school.
Subjects: Total enrollment (N=360) in a junior high school in a culturally deprived area.
Methods: Personality measures (sentence completion, objective questionnaires, etc.) used to classify students, 180 of whom were placed into classroom groups homogeneous in personality stage.
Findings: Thus far, stage-similar classroom grouping appears to have educational relevance.
Duration: July 1962-June 1965.
Investigator(s): David E. Hunt, Ph.D., Associate Professor of Psychology, Syracuse University, Syracuse, N. Y.
Cooperating group(s): Ford Foundation; Office of Education, U. S. Department of Health, Education, and Welfare.

18-K-6 PERSONALITY DEVELOPMENT OF ADOPTED CHILDREN DURING MIDDLE CHILDHOOD AND EARLY ADOLESCENCE

Purpose: To identify factors in the life history of adopted children which differentiate between healthy personality development and personality disturb-

ance. Major questions center around development of identity and the self-concept, the role of identification in development of impulse control, and long-term implications for personality development of maternal separation during infancy.
Subjects: 75 children studied at 8 and 10 years of age.
Duration: January 1964-indefinite.
Investigator(s): Leon J. Yarrow, Ph.D., Director, and Marion S. Goodwin, M.A., Assistant Director, Adoption Research Project, Family and Child Services, 929 L St., N. W., Washington 1, D. C.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-K-7 THE DEVELOPMENT OF ANXIETY IN BABIES AND YOUNG CHILDREN

Purpose: To study, by investigational and behavioral methods, those factors which appear to be responsible for the development of anxiety.
Subjects: Babies and young children.
Methods: Correlation of basic physiological data with reactions to normal situations and stimuli.
Duration: April 1964-1969.
Investigator(s): Dugal Campbell, Ph.D., Associate Professor of Psychology, and Michael Partington, Ph.D., Associate Professor of Pediatrics, Queen's University, Kingston, Ont.
Cooperating group(s): Provincial mental health grant.
Publication: To be submitted to pediatric and psychological journals.

18-K-8 SELF-PERCEPTION, STUDENT ROLE PERCEPTION, AND ANXIETY

Purpose: To determine the relationship between measures of self-concept and congruence of student role perception with institution, teacher and peers, and measures of anxiety.
Subjects: 225 school children randomly selected from grades four, five, and six.
Methods: A correlational study utilizing the following instruments: (1) Self-Social Symbols tasks; (2) Student-Role Q-Sort; and (3) General Anxiety Scale for Children.
Duration: September 1963-September 1964.
Investigator(s): Howard E. Lamb, Ed.D., Assistant Professor of Education, University of Delaware, Newark, Del.

18-K-9 PHYSIOLOGIC, I.Q. AND ANXIETY MEASURES OF CHILD DENTAL PATIENTS

Purpose: To determine, by means of objective data, reactions of children of various age groups to the dental situation and to modifications of the situation by a simulated dental procedure, an induced pain, and by exposure to audio analgesia.
Methods: (1) Physiologic responses of children four through six years of age will be measured by means of galvanic skin response (GSR), blood flow (BF), and cardiac rate recorder before coming to, and within, the dental treatment situation. How these physiological effects are varied by introduction of additional stimuli such as simulated dental cavity excavation using a finishing bur, and use by the child of an earphone type stereophonic music producing device (Audiac) will be evaluated. These two stimuli will be evaluated individually and together for any interactions. (2) The same physiologic reactions will be measured in children eight through fourteen years of age. Also measured will be physiological reactions caused by application of a reproduci-

ble dental procedure (i.e., electric stimulation to tooth pulp, carried to pain reaction threshold). The effect of introducing four components of audioanalgesia into this painful situation will be observed to see how they influence the physiologic responses. (3) Any relationship will be determined between anxiety levels as determined by Children's Manifest Anxiety Scale, I.Q. as determined by Columbia Mental Maturity Test, and the physiological data obtained above.
Duration: 1962-October 1964.
Investigator(s): Jack W. Howitt, D.D.S., Clinic Supervisor, Eastman Dental Dispensary, 800 East Main St., Rochester, N. Y.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Pilot study submitted to Journal of Dentistry for Children.

18-K-10 THE DEVELOPMENT OF SELF AND SOCIAL CONSTRUCTS

Purpose: To investigate the development of the self and social constructs of children, especially the definition of the self in relation to others.
Subjects: 312 elementary school children in grades 1 through 6.
Methods: Children's Self and Social Constructs Test, an Individualism Scale, Power and Evaluative Scales from the Semantic Differential, and a Sociometric Scale were administered in classrooms to 26 boys and 26 girls in each grade from 1 to 6. Effects of grade level and sex on each measure were analyzed and all measures intercorrelated with each other.
Findings: To date, significant effects for sex, grade, and sex by grade have been found in relation to 21 personality measures; further analyses are in process.
Duration: January 1963-January 1964.
Investigator(s): Barbara H. Long, Ph.D., Research Fellow, Robert C. Ziller, Ph.D., Associate Research Professor, Center for Research on Social Behavior, and Edmund H. Henderson, Ph.D., Assistant Professor of Education, University of Delaware, Newark, Del. (Reported by Gorham Lane, Ph.D., Professor of Psychology, University of Delaware.)
Cooperating group(s): Department of the Air Force, U. S. Department of Defense; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Plan to submit to Child Development.

18-K-11 SELF AND SOCIAL CONSTRUCTS AND GEOGRAPHIC MOBILITY

Purpose: To test hypotheses derived from a consideration of the impact of mobility on a self-social constructs theory of personality.
Subjects: 219 eighth grade students of both sexes, 83 of whom have lived all their lives in a single community, while others have moved three or more times.
Methods: Self-Social Symbols Tasks (Ziller, Alexander, and Long, 1964) and a measure of self-other orientation were administered to subjects.
Findings: Children who have moved frequently: (1) perceive the self as more central and as more different; (2) are more other-, rather than self-oriented; (3) are more dependent; and (4) have less interest in self-analysis.
Duration: January-September 1964.
Investigator(s): Robert C. Ziller, Ph.D., Associate Research Professor and Barbara H. Long, Ph.D., Research Fellow, Center for Research on Social Behavior, University of Delaware, Newark, Del. (Reported by G. Gorham Lane, Ph.D., Professor of Psychology, University of Delaware.)
Cooperating group(s): Department of the Air Force, U. S. Department of Defense; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to Journal of Social Psychology.

18-K-12 SELF AND SOCIAL CONSTRUCTS AND SOCIAL DESIRABILITY

Purpose: To test hypotheses derived from theories of self and social constructs in a field study of popular and nonpopular children.
Subjects: 25 popular and 25 nonpopular children, selected from extremes of a sociometric test given to 6th grade classes.
Methods: The Self-Social Symbols Tasks, largely nonverbal measures of self in relation to others, were illustrated to subjects.
Findings: Significant differences between groups were found in relation to parental identification, complexity of self, centrality of self, power in relation to teacher, self-esteem, and independence.
Duration: September 1963-October 1964.
Investigator(s): Robert C. Ziller, Ph.D., Associate Research Professor, Center for Research on Social Behavior; Barbara H. Long, Ph.D., Research Fellow, University of Delaware, Newark, Del.; and Morea Alexander, M.A., Elementary School Teacher. (Reported by G. Gorham Lane, Ph.D., Professor of Psychology, University of Delaware.)
Cooperating group(s): Department of the Air Force, U. S. Department of Defense; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-K-13 FACTORS AFFECTING THE YOUNG CHILD'S SELF-CONTROL AND CONFORMITY TO ADULT-IMPOSED RESTRICTIONS

Purpose: To investigate antecedents and correlates of self-control and conformity.
Subjects: Preschool children.
Methods: In experimental situation, child (or 2 or 3 children) will be left alone in a room with instructions to play with or use a small supply of toys and materials. Children will have been given instructions that restrict their use of materials, and their adherence to restrictions will be observed through a one-way vision mirror and recorded. Specific variables to be studied are: (1) effects of giving a child reasons and explanations for restrictions imposed on him versus making arbitrary demands; (2) effects of making consequences of misbehavior explicit versus ambiguous; and (3) differential effects of disciplining agents who are supportive and nurturant versus ones who are threatening and punitive. Self-control in the experimental situation will also be related to certain personality characteristics (frustration tolerance and delay of gratification), sociometric status with peers, and parental discipline practices.
Duration: June 1964-March 1965.
Investigator(s): Shirley G. Moore, Ph.D., Associate Professor of Child Psychology, Institute of Child Development, University of Minnesota, Minneapolis, Minn.
Publication: Probably to appear in Child Development.

18-K-14 SIBLING ASSOCIATIONS AND INTERACTIVE RESPONSE SETS

Purpose: The present study is concerned with the operational measurement of interactive response sets originating in subject's association with other persons, in particular, those with his siblings. Stimulus conditions relevant to this inquiry are those resulting from subject's ordinal position and from sex status of subject's siblings. Because of their enduring influence, it is assumed they lead to development of characteristic interactive response sets, which in turn manifest themselves in personality characteristics and a variety of performances (cognitive, vocational, sex role preferences). It is hypothesized that specific classes of social interaction here defined lead to sets which differentiate members of varying ordinal positions and sibling sex status on variables of congruence of self and role perceptions, role taking ability,

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role clarity and conformance, empathy, and response stereotypy.
Subjects: 120 children in the 8, 2-child family combinations and their parents; 400 adults, 17 to 23 years old.
Methods: Measures involve the Adjective Check List, As-If Test, Stick-Figure Test, and an interview schedule to evaluate presence and effects of hypothesized sets, flexible-diffuse, and stability-stereotypy.
Duration: 1963-1965.
Investigator(s): Benjamin G. Rosenberg, Ph.D., and Brian Sutton-Smith, Ph.D., Associate Professors of Psychology, Bowling Green State University, Bowling Green, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-K-15 SEX ROLE IDENTIFICATION IN MALE ADOLESCENTS

Purpose: To assess role identification in father-absent Negro and white adolescents with regard to field dependence as defined by Witkin.
Subjects: Negro and white, male and female adolescents.
Methods: Use of Witkin's Rod and Frame Test, Osgood's Semantic Differential, and Gough's Masculinity Scale to assess masculine role and degree of field dependence.
Findings: Negro father-absent children are more field dependent.
Duration: October 1963-September 1964.
Investigator(s): Allan G. Barclay, Ph.D., Chief Psychologist, Department of Pediatrics, Cardinal Glennon Memorial Hospital for Children, St. Louis University, St. Louis, Mo.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to *Journal of Social Psychology* and *Journal of Personality*.

18-K-16 IDENTITY IN ADOLESCENTS AND ITS RELATION TO DEVIANCY

Purpose: To study adolescent boys' perceptions of themselves, their views of the perceptions others have of them, and the demands these important others make of them; to relate these perceptions to mental disturbance and delinquent behavior.
Subjects: 60 normal adolescent boys matched by age, socio-economic status, and I.Q. with 30 delinquent and 30 psychotic boys.
Methods: Each subject describes on semantic differential actual self, ideal self, self as perceived by parents, teachers, and friends, and self as parents, teachers, and friends would like subject to be. D^2 relations between these semantic differential profiles will be computed.
Duration: December 1963-December 1964.
Investigator(s): John B. Marks, Ph.D., Director, Mental Health Research Institute, State Department of Institutions, Ft. Steilacoom, Wash., and Irwin G. Sarason, Ph.D., Department of Psychology, University of Wisconsin, Madison 6, Wis.

18-K-17 SOCIALIZATION OF AGGRESSION

Purpose: To test the hypotheses that: (1) positive frustration (i.e., demands) in child-rearing practices leads to negative aggression; and (2) that negative frustration (i.e., inhibitions) leads to positive aggression.
Subjects: Preschool and nursery school children.
Methods: Questionnaire to determine mothers' and fathers' emphases on

encouraging versus discouraging as control techniques, related to children's responses to frustrations in doll play.
Findings: Preliminary analyses indicate some support for hypotheses.
Duration: 1963-1965.
Investigator(s): Jesse E. Gordon, Ph.D., Associate Professor of Psychology, University of Michigan, Ann Arbor, Mich.
Publication: Publication planned for 1965.

18-K-18 HYPNOTIC SUSCEPTIBILITY IN MIDDLE CHILDHOOD: FURTHER STUDIES

Purpose: To describe the relationship of hypnotic susceptibility to age groups, age changes (longitudinally), parent identification patterns of children, and interests/activities of children.
Subjects: 25 to 30 children, 8 to 16 years of age, most of whom participated in an original study two years ago (Bulletin 16, Research Relating to Children).
Methods: Children's Hypnotic Susceptibility Scale; Stanford Hypnotic Susceptibility Scale, Form B; semi-structured child interview on play, interests, fantasy; questionnaire on daydreaming for children; structured interview with mother to ascertain child and parent characteristics and family interaction patterns.
Duration: October 1963-January 1965.
Investigator(s): Rosemarie K. Moore, Ph.D., Research Associate, Laboratory of Human Development, Stanford University, Stanford, Calif.
Publication: To be submitted to professional journals.

18-K-19 SENSE OF HUMOR AS A DIMENSION OF CREATIVITY

Purpose: To determine if there is any correlation between creativity and sense of humor.
Subjects: 127 public elementary school pupils, grades 5 and 6.
Methods: A correlational study between children's scores on the Minnesota Tests of Creative Thinking (Abbreviated Form VII) and scores on an instrument developed by the researcher, involving children's responses to uncaptioned original cartoons, judged for their humor by independent judges.
Duration: September 1963-September 1964.
Investigator(s): Donald R. Ferris, Ed.D., Associate Professor of Elementary Education, Purdue University, Lafayette, Ind.
Cooperating group(s): San Jose State College Foundation.
Publication: To be published in appropriate journals when completed.

18-K-20 PRESCHOOL CHILDREN'S WILLINGNESS TO TRY DIFFICULT TASKS

Purpose: (1) To develop three research instruments for the measurement of preschool children's willingness to try the difficult; (2) to determine whether willingness to try the difficult is a function of ability; and (3) to determine whether willingness to try the difficult is a relatively constant personality characteristic.
Subjects: Children, 3 to 5 years of age.
Methods: Three instruments for measurement of willingness to try the difficult, including: (1) a buttoning task based on fine motor coordination; (2) a puzzles task based on ability to see visual relationships; and (3) a target task based on gross motor coordination. Independent study of each instrument will focus on control of ability, as adequate control of this variable is essential if each child is to be offered choices between the easy and the difficult relative to his own ability. Planned adjustment for ability will be tested for each task by analyzing responses of children representing

three different ability groups. Responses of children to all three tasks will then be compared, and sex and age differences will be studied.
Duration: February 1964-February 1966.
Investigator(s): Elizabeth K. Starkweather, Ph.D., Associate Professor, Department of Family Relations and Child Development, Oklahoma State University of Agriculture and Applied Science, Stillwater, Okla. 74075.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Emotional and personality disturbances

18-L-1 DETECTION OF PATHOLOGY IN PREKINDERGARTEN CHILDREN

Purpose: To determine characteristics and behavior in the four and one-half year old child predictive of emotional disturbance in the school setting.
Subjects: 110 preschool children.
Methods: Behavior and personality characteristic rating scales filled out by mothers at time of children's kindergarten registration.
Duration: 1961-1964.
Investigator(s): Emory L. Cowen, Ph.D., Professor of Psychology, University of Rochester, Rochester 20, N. Y.

18-L-2 EARLY IDENTIFICATION OF THE SOCIALLY AND EMOTIONALLY MALADJUSTED

Purpose: To identify potentially maladjusted children; to set up a preventative program in public schools.
Subjects: Children in grades 1, 2, and 3.
Methods: Teacher observations and completion of a questionnaire.
Duration: October 1962-June 1964.
Investigator(s): Harry B. Fieldston, M.S.W., School Social Worker, Morris County Department of Education, Court House, Morristown, N. J.
Cooperating group(s): New Jersey State Department of Education.
Publication: Information may be obtained through investigator.

18-L-3 FOLLOW-UP STUDY OF MALADJUSTED CHILDREN IDENTIFIED AS NEEDING RESIDENTIAL TREATMENT IN HAWAII

Purpose: To obtain some indication of the degree of personal and social maladjustment of cases identified in a 1955 study (Bulletin 15, Research Relating to Children) as being in need of residential treatment; to determine extent of subject contact with critical psychiatric, correctional, and judicial agents subsequent to time of original study.
Subjects: 84 persons, ages 15 to 27, originally identified in 1955.
Methods: Files of various governmental agencies were checked for record of frequency, duration, and nature of contact. For example, type and number of offenses were obtained from criminal and correctional facilities. Diagnosis and type of services were obtained from psychiatric facilities. Private clinics and psychiatric units attached to general hospitals were also checked for contact.
Findings: Almost half of sample had been nominated for original study by correctional and judicial facilities; the other half were nominated by psychiatric and social facilities. In subsequent contact, more individuals were known to correctional facilities (72 percent) than those who received some kind of psychiatric care. Involvement with the "law" (acting-out behavior)

seems to be a common symptom of seriously disturbed children. While 46 percent of the sample had some psychiatric contact, another 46 percent received no psychiatric services after 1955. For those who received psychiatric care, services were primarily rendered on an outpatient basis of very short duration (63 percent seen seven times or less), and for evaluation in only 58 percent of the cases.
Duration: November 1963-May 1964.
Investigator(s): H. Kelly Naylor, Ph.D., Chief Clinical Psychologist, and Vera Young, M.A., Research Analyst, Mental Health Division, Hawaii State Department of Health, Honolulu, Hawaii.
Publication: Information may be obtained from investigator.

18-L-4 ESSEX CHILD DEVELOPMENT CENTER-GARDEN SCHOOL

Purpose: To study longitudinally the emotionally disturbed child; to evaluate family adequacy in relation to child; and to develop and describe experimental teaching program for emotionally disturbed child with neurological impairment and to describe the new program for preschool child.
Subjects: 20 school age and 4 preschool age day-patients in school setting.
Methods: Multidisciplined evaluation to include sociological, psychological, psychiatric, neurological, and educational appraisals.
Duration: 1960-continuing.
Investigator(s): Gloria Steiner, M.S., Psychologist, Robert Stepney, A.A.P.S.W., Clinical Administrator, and Alvin Friedland, M.D., Medical Director, Essex Child Development Center-Garden School, Franklin Ave., Belleville, N. J. 07109.
Cooperating group(s): Essex County Mental Health Association; Belleville Board of Education; New Jersey Department of Institutions and Agencies.
Publication: Annual special project report to New Jersey Department of Institutions and Agencies.

18-L-5 A FOLLOW-UP STUDY OF PRESCHOOL CHILDREN FROM A THERAPEUTIC NURSERY

Purpose: To study the natural history of early disturbances of psychological functioning.
Subjects: Children who have attended the Child Development Center nursery or Outpatient Therapy department.
Methods: Age-specific scales; symptom checklists; Q-sort.
Duration: 1964-1966.
Investigator(s): Peter B. Neubauer, M.D., Director, Child Development Center, 120 W. 57th St., New York 19, N. Y.

18-L-6 ETIOLOGICAL FACTORS IN CHILD PSYCHOSIS: THE ROLE OF DEVIANT SENSORY EXPERIENCE

Purpose: To explore hypotheses regarding the etiologic role of deviant sensory capacities or functioning in the development of childhood psychosis.
Subjects: All children diagnosed as "childhood psychotic" over a period of three years at Children's Psychiatric Hospital.
Methods: Initially, review is made of selected facets of the reported early developmental history of childhood psychotics, as available in case records. Later, direct interviews with parents of childhood psychotics will be conducted with more specific focus upon child's early sensory development.
Findings: Initial findings suggest relatively small incidence of sensory deviations in these children; but study of a much larger group, with specifically focused parent interviews, and analysis of data in terms of different sub-types of childhood psychoses will provide more conclusive data.
Duration: January 1964-September 1965.

Investigator(s): Albert C. Cain, Ph.D., Children's Psychiatric Hospital, University of Michigan Medical Center, Ann Arbor, Mich.

18-L-7 THE SECOND PHASE OF THE BEHAVIORAL CLASSIFICATION PROJECT

Purpose: To validate the dimensions of children's emotional disorders discovered in the first phase of Behavioral Classification Project (Bulletin 14, Research Relating to Children).
Subjects: First admissions to child guidance clinics in Florida and Louisiana, specified institutional children, and normal controls.
Methods: Administration of Behavioral Classification Project items on punch cards to respondents, primarily mothers of subjects; determination of demographic and personal history variables; factor analysis of correlation matrix of intercorrelations of Behavioral Classification Project and social case items; comparison of resulting factors with those derived from two major trial projects in first phase; setting up hypothesis and procedures for third phase.
Duration: June 1964-August 1965.
Investigator(s): Ralph Mason Dreger, Ph.D., Professor of Psychology, Louisiana State University, Baton Rouge, La.
Cooperating group(s): Florida Council of Mental Health Clinic Directors.
Publication: Journal of Consulting Psychology, 28:1-13, 1964.

18-L-8 VIDEO-TAPE OBSERVATIONS OF DISTURBED YOUNG CHILDREN

Purpose: To devise a play situation for use with disturbed young children which will have the potential of discriminating between diagnostic groupings and which can be recorded on video-tape for future viewing and analysis.
Subjects: 30 children, 3 to 8 years, from following categories: psychotic reactions (schizophrenic and/or autistic); brain-damaged, with or without associated mental retardation; mixed clinical pictures of the above entities; severe speech problems; and mental retardation. Normal subjects, ages 2 to 4 comprise a control group.
Methods: Standardized play interview situation used, designed to elicit specific behavioral reactions such as constructive play, persistence at a task, interaction with adult examiner, reactions to frustration and gratification. Data will be analyzed by means of ratings of specific behavior and by use of a multi-pen event recorder, while viewing tapes, to record duration and frequency of various modes of reaction.
Duration: December 1963-March 1965.
Investigator(s): Mary R. Haworth, Ph.D., Associate Professor of Medical Psychology, and Frank J. Menolascino, M.D., Instructor in Neurology and Psychiatry, College of Medicine, University of Nebraska, Omaha 5, Nebr.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published.

18-L-9 BEHAVIOR CLASSIFICATION, EARLY LEARNING EXPERIENCE, AND PSYCHO-EDUCATIONAL MANAGEMENT OF EMOTIONALLY DISTURBED CHILDREN

Purpose: To develop a system of behavior classification constructs for emotionally disturbed children having relevance to etiology, treatment, and prognosis.
Subjects: Groups of emotionally disturbed children in schools and hospitals. Children from Project Re-ed (George Peabody College) constitute central group on which project is based.
Methods: Collection of four classes of data: (1) child-rearing practices and

role values of parents; (2) behavior of subjects; (3) treatment approaches used; and (4) child's future level of functioning. Correlation, factor analysis, and discriminant functions will be used in analysis.
Findings: Rating/ranking instrument for child behavior is being developed. Mean test-retest reliability coefficients range from .72 to .97.
Duration: September 1963-1967.
Investigator(s): Rue L. Cromwell, Ph.D., Associate Professor of Psychiatry, Vanderbilt Medical Center, Nashville, Tenn.
Cooperating group(s): Project Re-ed, George Peabody College for Teachers.

18-L-10 DIFFERENTIAL CRITERIA FOR ASSESSMENT OF SERIOUSLY DISTURBED CHILDREN

Purpose: To develop and refine evaluative criteria for use in establishing training goals for seriously disturbed children.
Subjects: Children enrolled during last 8 years in League School For Seriously Disturbed Children.
Methods: Nursery population periodically evaluated; subjects assigned to training groups as part of training program set up by educational therapist. Children evaluated and re-evaluated by psychologist, educational therapist, and language therapist.
Duration: June 1963-August 1964.
Investigator(s): Zelda S. Klapper, Ph.D., Assistant Research Professor of Pediatrics, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-L-11 ENDOGENOUS BIOLOGICAL RHYTHMS IN CHILDREN

Purpose: To distinguish factors of organicity in different types of behavior disorders through frequency analysis of a variety of spontaneous endogenous oscillations.
Subjects: Children with mental retardation, spastic and athetoid types of cerebral palsy, schizophrenia, and normals. Thus far, 100 retardates have been studied.
Methods: A battery of autonomic, metabolic, and perceptual psychologic measures.
Duration: April 1963-March 1965.
Investigator(s): John W. Lovett Doust, M.D., Professor of Psychiatry, University of Toronto, Toronto, Ont.
Cooperating group(s): Ontario Mental Health Foundation; Metro Toronto Association for Retarded Children.

18-L-12 BEHAVIORAL CHARACTERISTICS OF HOSPITALIZED DISTURBED CHILDREN

Purpose: To study the children in five New Jersey Hospitals using the Children's Behavior Inventory developed by Burdock and Hardesty.
Subjects: All disturbed children through age 16, hospitalized in New Jersey's State Mental Hospitals (approximately 500 children).
Methods: The Burdock Children's Behavior Inventory, consisting of 146 behavioral items, age-graded, was filled in by suitable nursing personnel for all children. Children were re-rated by same persons at 3- and 12-month intervals. Reliability studies were made. Background information was obtained for each child from case records.
Duration: January 1963-January 1965.
Investigator(s): Frances E. Cheek, Ph.D., Chief, Experimental Sociology,

Bureau of Research in Neurology and Psychiatry, Box 1000, Princeton, N. J.
Publication: To be published as journal article or articles.

18-L-13 INVESTIGATION OF RELATIONSHIP BETWEEN MATERNAL NEEDS AND ATTITUDES AND PSYCHOPATHOLOGY IN BOYS

Purpose: To determine whether certain types of needs and attitudes in mothers are related to types of symptomatology in their sons.
Subjects: 70 boys, aged 6 to 12, seen as outpatients at Lafayette Clinic, and their mothers.
Methods: PARI, WAIS, MMPI, Edwards Personality Preference Schedule, and a TAT-type test developed for this study were administered to mothers. Boys were given WISC, Rorschach, other parts of a standard battery (e.g., perceptual-motor measures), and the same TAT-type test. Analysis is being done across needs, diagnostic categories of child (psychosis, neurosis, character disorder, etc.), and across cardinal figures (father, mother, peer).
Duration: June 1963-October 1964.
Investigator(s): Jean S. Braun, Ph.D., Chief Psychologist, Children's Service, and Shirley I. Dobie, Ph.D., Chief Psychologist, Outpatient Service, Lafayette Clinic, 951 E. Lafayette St., Detroit, Mich.
Publication: Papers in preparation.

18-L-14 CHILDREN'S REACTIONS TO THE DEATH OF A PARENT

Purpose: To study the impact of loss of a parent on children of different ages.
Subjects: Child and adolescent patients and surviving parents in treatment in an outpatient mental hygiene clinic; nonpatient children and parents.
Methods: Clinical case material is gathered; intensive interviews are conducted. Data are being analyzed particularly in regard to developmental variations in reactions to loss and factors making for pathological sequelae or for mastery of such trauma.
Duration: 1960-indefinite.
Investigator(s): Martha Wolfenstein, Ph.D., Clinical Associate Professor, and Gilbert Kliman, M.D., Clinical Instructor, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y. (Reported by Joseph B. Cramer, M.D., Associate Professor and Director of Child Psychiatry, Albert Einstein College of Medicine.)
Publication: To be published in professional journals and eventually in book form.

18-L-15 FOLLOW-UP STUDY OF MENTALLY ILL AND MENTALLY RETARDED CHILDREN

Purpose: To determine nature of children's social adjustment after being released from a mental hospital, with particular emphasis on family and school adjustment problems.
Subjects: Consecutive cases of 35 mentally ill and 21 mentally retarded children released from two State mental hospitals in California on leave of absence to the Northern Region Bureau of Social Work during April-June 1962.
Methods: Social and psychiatric data collected on child's background, treatment, and outcome after 12 months of leave. After 24 months of leave, an attempt is made to locate all children, interview their significant others, and trace the course of the posthospital adjustment period. A structured interview schedule will be administered by psychiatric social workers and data analyzed on basis of children's major social characteristics. Findings will be analyzed in relation to sociological theory of socialization processes, and attempts will be

made to trace social effects of residual deviancy labeling.
Investigator(s): Dorothy H. Miller, M.A., Psychiatric Social Worker, Social Research Laboratory, California State Department of Mental Hygiene, 3330 Geary Blvd., San Francisco, Calif. 94118.

18-L-16 ACHIEVERS AND NONACHIEVERS AMONG DISTURBED CHILDREN

Purpose: To investigate symptom patterns among achievers and nonachievers.
Subjects: 110 inpatients, 4 to 6 years of age, at Children's Psychiatric Hospital.
Methods: IPL-V, an information processing language handling symbolic data.
Duration: Not reported-August 1964.
Investigator(s): Franz Huber (Ph.D. Candidate), Assistant Director, University Hospital School, Medical Center, University of Michigan, Ann Arbor, Mich.

18-L-17 IDENTICAL TWINS WITH SCHOOL PHOBIA

Purpose: To gain insight into mechanisms of school phobias.
Subjects: Two sets of identical twins who manifested alternating or single twin school phobias.
Methods: Complete physical, psychological, and psychiatric examinations.
Duration: 1963-1964.
Investigator(s): William P. Moore, M.D., and Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-L-18 CLINICAL STUDY OF ENURESIS IN CHILDREN

Purpose: To study the value of placebo, Elavil, and Tofranil in childhood enuresis.
Subjects: Children, ages 6 to 15, with evident bedwetting (two or more times a week).
Methods: Placebo used for one to two weeks; then Elavil is given in standardized dosage schedules. If child still wets after one to two months, drug is changed to Tofranil for comparison purposes.
Duration: 1963-1964.
Investigator(s): Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, and staff, Houston State Psychiatric Institute, Houston, Tex.

18-L-19 PSYCHOPHYSIOLOGY OF SLEEP AND DREAMING IN DEPRESSED PATIENTS AND CHILDREN

Purpose: To study sleep and dreaming patterns of depressed patients and children. Of particular interest will be the amount and patterning of sleep and dreaming during part of the night depressed patient is able to sleep and studies of relationship of time of early morning awakening to dream periods. Depressed patients are to be studied because sleep disturbance is a major portion of the illness and because usual pattern of awakening coincides with period of maximal dreaming in normal subjects. An attempt will be made to clarify developmental pattern of sleep and dreaming in children and to secure dreams of children from different developmental periods so that a collection of children's dreams will be available for analysis.
Methods: EEG will be used to measure levels of sleep and detect periods of REM (rapid eye movements) as outlined by Dement and Kleitman; basal skin resistance and GSR activity of subjects will also be studied during sleep.

On occasion other parameters such as heart rate, skin and body temperature will be measured. Studies of depressed patients will include two nights of sleep studies at beginning of hospitalization and another night following improvement. When feasible, extra nights of study will be utilized to awaken these patients during dreaming phase to collect dreams of depressed patients.
Investigator(s): David R. Hawkins, M.D., Professor of Psychiatry, and George C. Thrasher, M.D., Instructor in Psychiatry, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-L-20 DREAMING SLEEP IN AUTISTIC CHILDREN

Purpose: To look for variations in patterning and amount of dreaming in autistic children.
Subjects: Autistic children, aged 4 to 7 years.
Methods: Continuous EEG and polygraphic analysis during normal sleep.
Findings: Thus far, frequency and amount of dream time equal to that reported for normal children.
Duration: January 1964-not reported.
Investigator(s): Edward M. Ornitz, M.D., Staff Psychiatrist, Reiss-Davis Clinic; and Edward Ritvo, M.D., School of Medicine, University of California, Los Angeles, Calif.
Publication: Science.

18-L-21 EXPERIMENTAL STUDIES IN AUTISM: ESTABLISHMENT OF SOCIAL REINFORCERS

Purpose: Autism is a disturbance where there is no hierarchy of social reinforcers. Social reinforcers are established when coupled with both positive and negative primary reinforcers. This study proposes a classical operant conditioning technique in which autistic children would be able to establish a whole host of secondary social reinforcers.
Subjects: 3 boys and 1 girl, ages 5 to 9. Diagnosed as having schizophrenic disturbances of autistic type.
Methods: Use of food as positive reinforcer; minimal but bothersome electrical stimulus as negative reinforcer.
Findings: Behaviors have been established including social nonverbal (games, imitation, etc.) and verbal (speech and meaning). Learned behavior can be extinguished in many instances by noncontingent reinforcement.
Duration: June 1963-indefinite.
Investigator(s): O. Ivar Lovaas, Ph.D., Assistant Professor of Psychology, and James Q. Simmons III, M.D., Senior Psychiatrist and Chief, Child Psychiatry (Inpatient Service), Neuropsychiatric Institute, University of California, Los Angeles 24, Calif.

18-L-22 APPLICATION OF REINFORCEMENT PRINCIPLES IN THE TREATMENT OF AUTISTIC CHILDREN

Purpose: To develop techniques of behavioral modification applicable to autistic and schizophrenic children.
Subjects: At present, one 8-year old schizophrenic boy.
Methods: Use of food and other reinforcers are being systematically applied to problems of visual and auditory learning, both abstract and of normal social responses.
Findings: Extreme difficulty being found in trying to develop verbal behavior and differences between visual and auditory learning, the visual stimuli being more easily and accurately responded to.

Duration: April 1963-continuing.
Investigator(s): Montrose Wolf, Ph.D., Psychologist, Institute of Child Development, and Todd Risley, M.S., Graduate Student, University of Washington, Seattle; Hayden L. Mees, Ph.D., Clinical-Research Psychologist, Western State Hospital, Ft. Steilacoom, Wash. 98332.
Publication: Probably will not be published. Information will be available from investigators.

18-L-23 SCHIZOPHRENIA IN CHILDREN OF MENTAL PATIENTS

Purpose: To gain information about relative importance of hereditary factors as compared with early environmental factors in the etiology of schizophrenia.
Subjects: A group of children born to mentally ill women in Massachusetts mental hospitals; a group of children born in a Massachusetts institution serving obstetrical needs of illegitimately pregnant, underprivileged mothers.
Methods: Long term follow-up, by retrospective cohort study approach, to determine frequency of admission to mental hospitals as adults of members of the two study groups; comparison of these frequencies with expected frequencies based on general population experience.
Duration: April 1964-April 1966.
Investigator(s): Thomas F. Pugh, M.D., M.P.H., Associate Clinical Professor of Epidemiology, and Samuel G. McClellan, M.D., M.P.H., Research Associate, Department of Epidemiology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Massachusetts Department of Mental Health; Massachusetts State Department of Public Welfare.

18-L-24 EXPERIMENTAL STUDIES OF CHILDHOOD SCHIZOPHRENIA

Purpose: To establish social and intellectual behaviors in schizophrenic children; to analyze current behavior repertoires.
Subjects: Schizophrenic children with autistic features, 4 to 11 years of age.
Methods: Conceptually, a reinforcement theory paradigm is followed; methodologically, a single subject replication design is followed.
Findings: Techniques produced acquisition of speech in mute children and acquisition of reading and writing in echolalic children. Social determinants of self-destructive behavior follow reinforcement theory paradigm.
Duration: Not reported-June 1965.
Investigator(s): Ivar Lovaas, Ph.D., Assistant Professor of Psychology, University of California, Los Angeles 24, Calif.
Publication: Papers in press.

18-L-25 CHILDHOOD EXPERIENCES LEADING TO OR CORRELATED WITH TRANSVESTISM OR TRANSSEXUALISM

Purpose: The prevention and/or therapeutic interference with the established compulsion.
Subjects: Children, all ages, evidencing transvestism or transsexualism.
Methods: Interview, hypnoanalysis.
Duration: March 1963-1965.
Investigator(s): Hugo G. Beigel, Ph.D., Sexologist (private practice), 138 E. 94th St., New York, N. Y. 10028.
Publication: To be published.

18-L-26 FACTORS IN ADOLESCENT SUICIDE ATTEMPTS

Purpose: To develop hypotheses concerning the etiology of attempted suicide in adolescence.
Subjects: 50 adolescents, aged 14 to 18, hospitalized in Los Angeles County General Hospital for an actual suicidal attempt.
Methods: Intensive psychiatric, psychological, and sociological study by means of interviews and specially designed questionnaires and treatment.
Duration: September 1963-August 1966.
Investigator(s): Joseph D. Teicher, M.D., Professor of Psychiatry, University of Southern California School of Medicine, and Director, Children's and Adolescent Psychiatric Services, Los Angeles County General Hospital, Los Angeles, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers and a monograph.

18-L-27 ASTHMA FOLLOW-UP STUDY

Purpose: To investigate variables that influence whether and when children "outgrow" asthma.
Subjects: Sample drawn from approximately 100 children treated in unit for asthma, on the average eight years ago.
Methods: Prediction of outcome of asthma based on psychotherapeutic material; follow-up interviews with patient and mother to assess asthma and general psychological status.
Investigator(s): John Lamont, M.D., Director, and Jack O. Rice, M.D., Child Psychiatry Unit, Massachusetts General Hospital, Boston, Mass.
Publication: Chapter in book: Schneer, H. I. ed., *The Asthmatic Child*, New York: Paul B. Hoeber, 1963.

18-L-28 FOLLOW-UP STUDY OF ASTHMATIC CHILDREN

Purpose: To study children now in adolescence who were seen in therapy during latency; to try to determine whether they still have asthma; if not, to ascertain time of and factors pertinent to its disappearance.
Subjects: A clinic population of mothers and children previously seen in casework and psychotherapy.
Methods: Psychiatric interviews with former patients and casework interviews with their parents. Prior to follow-up interviews, predictions are made based on knowledge of case and hypotheses concerning emotional components of the illness.
Duration: September 1963-summer 1965.
Investigator(s): John Lamont, M.D., Jack Rice, M.D., and C. Katz, M.S.S., Child Psychiatry Unit, Massachusetts General Hospital, Boston, Mass. (Reported by Grace Nicholls, M.S.S., Supervisor of Social Service, Child Psychiatry Unit, Massachusetts General Hospital.)

18-L-29 PSYCHIATRIC STUDY OF A FAMILY WITH VON GIERKE'S DISEASE

Subjects: Two parents and three male siblings; two siblings have Von Gierke's disease; mother and other sibling have positive blood factors for the disease.
Methods: Complete medical and psychiatric evaluations in a family cross-sectional study. Follow-up after one year of psychotherapy for parents only, to see effects on children, especially middle sibling who does not have clinical evidences of the disease but is most disturbed child.

Duration: 1964-1967.
Investigator(s): Mae McMillan, M.D., and Irvin Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-L-30 PSYCHIATRIC STUDY OF CHILDREN WITH DYSTONIA MUSCULORUM DEFORMANS

Subjects: Two children with dystonia musculorum deformans. Both have had neurosurgical ablation procedures; one developed a severe psychosis nine years postoperatively and has been under psychotherapy.
Methods: Complete neurological and psychiatric histories were taken. Data from postoperative course are available. Novel treatment techniques evolved to work with neurological sequelae and their psychological components.
Duration: 1960-1965.
Investigator(s): Paul V. Ledbetter, Jr., M.S.W., and Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-L-31 ARE THERAPY AND TRANQUILIZERS A CURE FOR ACTING OUT BRAIN-DAMAGED MENTALLY RETARDED CHILDREN?

Purpose: To determine the effect of therapy and tranquilizers on behavior of brain-damaged mental defectives who have been classified as having behavior problems.
Subjects: 16 children, ages 7 to 15.5 years, I.Q. range 40 to 70, who are residents of the Dixon State School.
Methods: Children are matched pair-wise on basis of whether brain damage was caused by infection or trauma and, secondly, by sex. Within each of the four categories subjects were matched according to age and I.Q. One member of each pair will be selected at random for experimental group; other member to control group. Four subjects in each group will receive tranquilizers while others will receive placebos. Testing will be done before and after to determine any change.
Duration: February 1964-January 1965.
Investigator(s): Paul Tillman, M.D., Assistant Superintendent, Barbara Mason, M.A., and Elizabeth Davis, M.A., Psychology Staff Members, Dixon State School, Dixon, Ill. (Reported by Anna P. Johnson, M.A., Psychologist III, Dixon State School.)
Publication: To be published.

18-L-32 AVOIDING INSTITUTIONALIZATION OF PSYCHOTIC CHILDREN

Purpose: To see if children who would ordinarily be referred to an institution can continue functioning in their own homes through the use of a tranquilizing agent, Stelazine; to examine the changes which take place to allow him to remain in the community.
Subjects: A sample of 50 psychotic children who would ordinarily be referred for institutionalization, divided into 2 groups matched for age and sex.
Methods: Experimental group will receive Stelazine; control group will receive placebo in a double-blind manner. Treatment will last 26 weeks. Evaluations made when child begins study, after one week, after 13 weeks, and at the end of 26 weeks. Dependent variables will be: (1) ability to function effectively within the community; and (2) measurement of child's intellectual functioning, personality traits, mood, social adjustment, and symptomatology. To obtain these measures, mother's reports to a psychiatric social worker, teacher's reports, psychiatric evaluation, and psychological testing will be employed.
Duration: 1963-August 1965.

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Investigator(s): Richard M. Silberstein, M.D., Director, and Wallace Mandell, Ph.D., Director of Research, Staten Island Mental Health Society, Inc., 657 Castleton Ave., Staten Island 1, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-L-33 EFFECTS OF DRUGS ON INFORMATION PROCESSING IN EMOTIONALLY DISTURBED AND HYPERKINETIC CHILDREN

Purpose: (1) To determine effects of information on continuous performance tasks; (2) to study interaction of diagnostic category with drug response on attention and continuous performance tasks; (3) to study individual difference factors which determine attention and response to drugs.
Subjects: Inpatients at several institutions for emotionally disturbed and delinquent children; outpatient children referred for emotional problems and problems of learning in school.
Methods: A five-choice continuous performance apparatus presents colors and patterns in various combinations at fixed time intervals and rates (e.g. 1/sec.). Different amounts of uncertainty are used for different conditions, varying from one to four bits of information per stimulus. A stimulus-response matrix and reaction times give information regarding subject's errors, omissions and latencies of response. A five-tone auditory stimulus may be used as an additional distractor. A factored battery of objective personality tests is used to measure individual differences.
Duration: June 1964-June 1968.
Investigator(s): Leon Eisenberg, M.D., Professor of Child Psychiatry, and C. Keith Conners, Ph.D., Assistant Professor of Child Psychiatry, Johns Hopkins Hospital, Baltimore 5, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Findings will be published in appropriate APA journals.

18-L-34 MODIFICATION OF BEHAVIORAL CHARACTERISTICS IN AUTISTIC CHILDREN USING LSD AND UML 491

Purpose: To determine, if possible, any usable modification of behavior in autistic children.
Subjects: Pair of homozygous autistic twins, 5 years of age.
Methods: In double blind fashion, subjects were administered 50 mg. of LSD 25 (lysergic acid diethylamide) in acute experiments and then studied in standard situations involving being alone or with investigator; clearly defined dependent variables were measured.
Findings: There was an increase in laughing and smiling behavior, decrease in self-stimulatory behavior, and increase in physical contact with investigator.
Duration: June 1963-September 1964.
Investigator(s): James Q. Simmons III, M.D., Senior Psychiatrist and Chief, Child Psychiatry (Inpatient Service); Stanley J. Leiken, M.D., Neuropsychiatric Institute; and O. Ivar Lovaas, Ph.D., Assistant Professor of Psychology, University of California, Los Angeles 24, Calif.
Publication: To be submitted to Archives of General Psychiatry in January 1965.

18-L-35 EFFECT ON CHILDREN OF SHORT-TERM INTENSIVE TREATMENT

Purpose: To determine the effect of short-term, intensive treatment on patients in a children's psychiatric hospital.
Subjects: Approximately 100 preadolescent and adolescent youngsters, 5 to 16

years of age.
Methods: Patient's progress for five years after discharge from hospital will be followed by all members of the clinical team. The psychiatrist will annually interview the patient, and the psychologist will retest him at the same time. Additionally, the social worker will assess any changes in the environmental situation that occurs.
Duration: January 1964-January 1970.
Investigator(s): Douglas Powers, M.D., Director, Virginia Treatment Center for Children and Associate Professor, Medical College of Virginia, Richmond, Va.
Cooperating group(s): Virginia State Department of Mental Hygiene and Hospitals.
Publication: Publication planned in psychiatric, psychological, and social work journals.

18-L-36 ON CHILDHOOD PSYCHOSIS

Purpose: To obtain further information about the treatment of psychotic children, with special emphasis on ego functioning.
Subjects: Psychotic children.
Methods: Electrical recordings, therapists' summaries, and repeated psychological testing are basic techniques for gathering information. Thus far, research has been essentially clinical in nature, although it is planned to develop a formal research investigation; proposed area of investigation is use of "distance" as a psychological mechanism.
Findings: Findings have been clinical in nature and are in part already reported in the literature with additional reports to appear in the near future (e.g., an article by Dr. Rudolf Ekstein deals with theoretical explanation of echolalia on basis of clinical investigation; indices for evaluation of ego process on the Rorschach; and the emergence of parallel process in child and parent).
Duration: July 1962-indefinite.
Investigator(s): Rudolf Ekstein, Ph.D., Director, Elaine Caruth, Ph.D., Research Clinical Psychologist, and Mortimer M. Meyer, Ph.D., Director of Psychological Services, and staff, Reiss-Davis Clinic for Child Guidance, 9760 W. Pico Blvd., Los Angeles 35, Calif.

18-L-37 CLINICAL STUDY OF USE OF DREAMS IN THE PSYCHOTHERAPY OF ADOLESCENTS

Subjects: Adolescent boys and girls seen for treatment.
Methods: Dreams are collected at diagnostic meeting and during treatment; various techniques for using manifest and latent content are tried and evaluated.
Duration: 1958-1965.
Investigator(s): Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.
Publication: Preliminary report delivered before meeting of American Academy of Child Psychiatry, 1963.

18-L-38 GROUP PSYCHOTHERAPY OF PRESCHOOL PSYCHOTIC CHILDREN AND COLLATERAL GROUP THERAPY OF THEIR PARENTS

Purpose: An initial study (Bulletin 15, Research Relating to Children) revealed group therapy was feasible in children 33 to 48 months of age. A second study is now underway to determine feasibility of treating psychotic children aged 19 to 33 months.
Subjects: Eight children, 19 to 33 months old, diagnosed as childhood psychotics.

Methods: Group therapy with parents and children.

Findings: Group therapy with preschool psychotic child and collateral group therapy with parents is a feasible technique of treatment.

Duration: 1963-indefinite.

Investigator(s): Rex W. Speers, M.D., Assistant Professor and Director of Child Psychiatry, Cornelius Lansing, M.D., Assistant Professor of Psychiatry, and Robert Hughes, Ph.D., Assistant Professor of Psychology, School of Medicine, University of North Carolina, Chapel Hill, N. C.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Preliminary report of first two years published in *American Journal of Orthopsychiatry*, 34:4:659-666, July 1964. Book to be published by University of North Carolina Press.

18-L-39 STUDENT VOLUNTEERS WITH TROUBLED CHILDREN

Purpose: Demonstration project to assess weaknesses and strengths of having students from four different kinds of colleges work weekly in friendship roles with troubled children in a rural area.

Investigator(s): William E. Mitchell, M.A., Project Director, Hope Foundation, Montpelier, Vt.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Yearly reports and professional papers.

18-L-40 CLINICAL STUDY OF ADOPTED CHILDREN SEEN IN PSYCHIATRIC CONSULTATION

Purpose: To study statistically the adopted children seen for psychiatric consultation at the Houston State Psychiatric Institute.

Subjects: 40 or more adopted children and 400 natural children seen for psychiatric consultation.

Methods: Each subject is coded for approximately 80 behavioral variables. Computer analysis is made to determine what significant correlations emerge in each group and among subgroups.

Duration: 1962-1964.

Investigator(s): Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-L-41 FOLLOW-UP STUDY AT CHILD PSYCHIATRY CLINIC

Purpose: A follow-up of all children seen in the University of Florida Child Psychiatry Clinic since its inception in 1959.

Methods: (1) Mechanical collations of data from charts in a uniform way involving diagnostic categories and types of treatment used; (2) definite follow-up visits by staff child psychiatrists of selected groups of patients, either by diagnostic category or by date of discharge from clinic. Material will be available for a variety of follow-up projects.

Duration: March 1964-March 1966.

Investigator(s): R. Dean Coddington, M.D., Assistant Professor of Pediatrics and Psychiatry, Child Psychiatry Clinic, College of Medicine, University of Florida, Gainesville, Fla.

Cooperating group(s): Council for Research and Training in Mental Health, Florida State Board of Health.

Publication: To be published.

18-L-42 SUCCESS AND FAILURE IN EDUCATIONAL THERAPY--A FOLLOW-UP STUDY OF DISTURBED CHILDREN TREATED IN DAY CARE

Purpose: To describe the psychiatric and social-psychiatric dynamism in the success or failure of 426 former patients of the Educational Therapy Center following their release from treatment.
Methods: A detailed analysis will be made of the complex factors which contributed to the subject's emotional state at time of intake, to the complex and interwoven factors which had an impact on them while under treatment, as well as those that contributed: (1) to the maintenance or undoing of success after dismissal from treatment; or (2) to a belated recovery independent of therapeutic impact, or as an aftermath of it.
Duration: September 1963-continuing.
Investigator(s): Hertha Riese, M.D., Psychiatric Director, Educational Therapy Center, 201 North 19th St., Richmond, Va. (Reported by NCCD.)
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-L-43 REHABILITATION OUTCOMES OF FORMER STATE MENTAL HOSPITAL PATIENTS

Purpose: To develop a set of strategies to induce highest likelihood of successful community placements for former state mental patients.
Subjects: Teenagers and adults in three different community locations.
Methods: College undergraduates serve as research assistants over a three-month follow-up check of recently discharged patients.
Findings: Tentatively it has been found that male teenagers fare more successfully on the average in semi-industrialized, nontransient hotel locations than adults (25 to 40 years) in boarding home situations.
Duration: June 1963-June 1965.
Investigator(s): Donald L. Cohen, M.S.W., Instructor in Sociology and Anthropology, Pennsylvania State University, University Park, Pa.

Delinquency

Note: Some studies appearing in this section were selected from Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency published by the National Council on Crime and Delinquency in New York. Studies thus obtained are noted: (Reported by NCCD.)

18-M-1 A STUDY OF UNDETECTED DELINQUENCY

Purpose: To discover the frequency of delinquent behavior and its distribution by certain demographic characteristics; to describe the causative factors of such acts.
Subjects: Random sample of boys and girls, 13 to 16 years old, residing in the school district of a Michigan city of 200,000 population.
Methods: Interviews.
Findings: Thus far, about 70 percent of subjects reported their delinquent behavior honestly and completely when interview instrument was validated.
Duration: Not reported-June 1965.
Investigator(s): Martin Gold, Ph.D., Assistant Program Director, Donald Halsted, [illegible]Ph.D. Candidate), Instructor in Education, and Safia Kassim Mohsen, LL.D., Research Assistant, Institute for Social Research, University of

Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper to be read at American Psychological Association convention, 1964; monograph to be printed.

18-M-2 DELINQUENCY SURVEY IN EAST ST. LOUIS, ILLINOIS

Purpose: To determine the incidence, extent, and location of juvenile delinquency in East St. Louis. Information will be used for planning delinquency prevention programs in East St. Louis.
Subjects: All youths between the ages of 8 and 19 who have committed acts which violated state, federal, or community statutes between June 1, 1962 and May 31, 1963.
Methods: Records in enforcement agencies were consulted for compilation of data.
Duration: July 1963-September 1964.
Investigator(s): Albert H. Baugher III, B.S., Research Assistant, Delinquency Study Project, Southern Illinois University, Edwardsville, Ill. (Reported by Charles V. Matthews, Associate Professor and Director, Delinquency Study Project, Southern Illinois University.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Mimeographed copies will be available in the fall of 1964.

18-M-3 AN ECOLOGICAL STUDY OF DELINQUENCY IN HAMILTON

Purpose: An analysis of the ecological distribution of all Juvenile Court cases for each of the years from 1956 to 1962, and of all Juvenile Bureau apprehensions for the years 1961 and 1962.
Methods: Demographic factors, such as age, religion, sex, school attended, offense, and disposition are recorded and analyzed. A variety of comparisons are being made between the high and low delinquency rate areas in Hamilton, and factors related to rate changes in these areas are explored.
Findings: Indicate more change in high delinquency rate areas from year to year than is assumed by current delinquency studies and theory in other cities.
Duration: August 1962-August 1964.
Investigator(s): Sid Blum, M.A., Research Associate, Social Planning Council of Hamilton and District, 220 Main St. West, Hamilton, Ont. (Reported by NCCD.)
Cooperating group(s): Juvenile Bureau, Hamilton Police Department; Juvenile Court, City of Hamilton.
Publication: Juvenile Delinquency in Hamilton (mimeographed), available from the Social Planning Council.

18-M-4 DETERMINATION OF ETIOLOGIC TYPES AMONG "TRUE" DELINQUENTS

Purpose: To determine the major trait-factor patterns that distinguish 500 "true" delinquents from a matched sample of 500 nondelinquents, with a view to determining etiologic gradations from the most powerful to the least powerful patterns. Once the general etiologic types are arrived at, these types will be related to body build and to certain behavioral factors already found in Unraveling Juvenile Delinquency (Cambridge: Harvard University Press, 1950), to differentiate delinquents from nondelinquents. Subsequently, the etiologic types will be keyed into findings of follow-up study to age 32 of boys originally described in Unraveling Juvenile Delinquency at 11 to 17.
Methods: Statistical intercorrelational technique.

Duration: February 1962-indefinite.
Investigator(s): Sheldon Glueck, Ph.D., Roscoe Pound Professor of Law, Eleanor T. Glueck, Ph.D., Research Associate in Criminology, and staff, Law School, Harvard University, Cambridge 38, Mass. (Reported by NCCD.)
Cooperating group(s): American Child Guidance Foundation.
Publication: Family Environment and Delinquency, Boston: Houghton Mifflin Co., 1962.

18-M-5 A PSYCHOMETRIC STUDY OF THE YOUNG OFFENDER

Purpose: To determine the incidence of mental illness and mental deficiency among young offenders appearing in the Toronto Magistrates Court; to identify personality differences, if any, between classes of offenders; and to determine how the youthful offender differs from offenders of similar socio-economic status in terms of intelligence, personality, parent-child relations, and physical illness.
Subjects: A representative sample of youthful offenders (ages 16 to 21) stratified by broad type of offense. A control group of nonoffenders.
Methods: Administration of the Raven Matrices; Cornell Medical Index; MMPI; Parent-Child Relationship Questionnaire; WAIS administration for those falling below 25th percentile on Raven norms.
Duration: March 1963-December 1964.
Investigator(s): Dr. H. C. Hutchison, 7 Queens Park Crescent, Toronto, Ont. (Reported by NCCD.)
Cooperating group(s): Probationers' Aid Committee; Rotary Club of Toronto; Ontario Department of Health; Toronto Magistrates Courts.

18-M-6 A STUDY OF JUVENILE DELINQUENTS 16 TO 18 YEARS OLD

Purpose: To determine the degrees of maturity of subjects on somatic, psychological, and social levels; to attempt to establish criteria that will permit a more rational decision on: (1) legal disposition and institutional commitment for this particular age group; and (2) choice among the different legal solutions which are provided in the draft codes at present under study in Belgium.
Subjects: 200 boys, aged 16 to 18 years, who have committed an offense and have been brought before the juvenile court or have been transferred to ordinary courts.
Duration: October 1963-not reported.
Investigator(s): A. Racine, C. Somerhausen, G. Lejour, G. Renard, Chr. Debuyst, and R. Volcher, Centre d'Etude de la Delinquance Juvenile, 49 rue de Chatelain, Brussels 5, Belgium. (Reported by NCCD.)

18-M-7 ADOLESCENT GIRLS IN APPROVED SCHOOLS

Purpose: To study a large sample of girls admitted to the former Shaw Classifying School between 1950 and 1957; studies include overt problems, intelligence, educational functioning, and personality.
Methods: Individual and group intelligence tests; sentence completion and other tests of educational functioning. Training needs of girls and their subsequent success or failure in the training schools and during aftercare will be carefully studied.
Duration: December 1962-1964.
Investigator(s): Helen J. Richardson and Dr. Gordon Rose, Department of Social Administration, University of Manchester, Manchester, England. (Reported by NCCD.)
Cooperating group(s): Calouste Gulbenkian Foundation.

18-M-8 JUVENILE NONDELINQUENTS WHO BECAME DELINQUENTS

Purpose: After completion of Unraveling Juvenile Delinquency in which 500 serious delinquents were compared with 500 nonoffenders, a follow-up of both groups was undertaken (Bulletin 7, Research Relating to Children). Among many items, the follow-up encompasses the criminal histories of the boys from the time they were included in the Unraveling study until age 32. In the course of this inquiry it was discovered that some of the nondelinquents have become serious offenders. An analysis is being made of these findings and will eventually be presented as part of the follow-up inquiry.
Duration: July 1963-June 1965.
Investigator(s): Sheldon Glueck, Ph.D., Roscoe Pound Professor of Law, and Eleanor T. Glueck, Ph.D., Research Criminologist, Law School, Harvard University, Cambridge 38, Mass.
Cooperating group(s): Ford Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Unraveling Juvenile Delinquency, Cambridge: Harvard University Press, 1950.

18-M-9 A STUDY OF FACTORS INFLUENCING CHILD AND ADOLESCENT DELINQUENCY

Purpose: To discover the factors which influence child and adolescent delinquency in Medellin and in the Department of Antioquia.
Methods: Data collected include biographical information, medical history, home and other environmental circumstances, delinquency history, psychological data on intelligence, personality, character deficits, etc. Statistical analyses are made on basis of these data. Complete files exist for 8,000 boys committed since 1956; some data are available on an additional 16,000.
Duration: February 1956-continuing.
Investigator(s): Dr. Miguel Brinon Mercant, Certified Psychologist, Institute NTRA SRA de Luch, Calle 10, Numero 28-22, El Poblado, Medellin, Colombia. (Reported by NCCD.)
Cooperating group(s): City of Medellin, Colombia; Municipal Social Service.

18-M-10 SURVEYS OF PROBLEMS OF ADOLESCENTS IN NAIROBI, KENYA

Purpose: Apart from the report already published concerning juvenile prostitutes in Nairobi, four other surveys are underway: (1) an intensive study into the histories of 400 semidelinquent adolescent boys who have failed to remain in school; (2) an investigation of the causes of vagrancy as described by some 250 African juveniles; (3) an analysis of social life and problems of 400 Asian boys and 200 Asian girls; and (4) an attempt to apply the Beve Anthony Family Relationships Test to the extended family concepts of African children, with special regard to indications of emotional disturbances. Very little work of this type has been done in Kenya and problems of standardization are considerable.
Duration: February 1961-continuing.
Investigator(s): Rev. Julius I. Carlebach, c/o Barclays Bank, 543 Norwood Rd., London S.E. 27, England. (Reported by NCCD.)
Cooperating group(s): Child Welfare Society of Kenya; Associations of Youth Centres, Kenya; Kenya-Israel Rural Social Workers Training School.
Publication: Juvenile Prostitutes in Nairobi (East African Studies Number 16): Kampala, 1962.

18-M-11 MENTAL ABILITY AS A FACTOR IN JUVENILE TRAFFIC LAW VIOLATIONS

Subjects: 375 male and 7 female juvenile traffic law violators apprehended during the period February-October 1962 at the Otsu District Prosecutor's Office.
Methods: Administration of Tanaka's I.Q. test B-1 and Kraeplin-Uchida Achievement Test.
Findings: 63 percent of violators had I.Q.'s of 90 and above; 20 percent had I.Q.'s in 80-89 range; 14 percent had I.Q.'s below 79. 30 percent tested normal on the Kraeplin-Uchida test; 61 percent intermediate; and 8 percent abnormal.
Duration: February 1962-April 1963.
Investigator(s): Takashi Kasamatsu, 458 Tsubaki-Machi, Otsu-Shi, Shiga Prefecture, Japan. (Reported by NCCD.)
Cooperating group(s): Otsu Juvenile Detention and Classification Home; Otsu District Public Prosecutor's Office.

18-M-12 ITEM ANALYSIS OF THE HSPQ AND THE DEVELOPMENT OF A DELINQUENCY SCALE FOR THAT INSTRUMENT

Purpose: To discover whether there exists a pool of empirically derived items of the High School Personality Questionnaire (HSPQ) that differs significantly from the population at large.
Methods: A relatively small, but randomly selected sample of HSPQ profiles drawn from a delinquent population will be used. Item by item, the number of true and false responses will be counted to determine significant items in the delinquent population. From this, a scoring key will be developed with items weighted on the basis of magnitude of significance of difference from the population at large.
Findings: From examining profiles individually, it is clear that certain items very clearly deviate from a 50/50 hypothesis of chance alone.
Duration: November 1961-indefinite.
Investigator(s): George R. Pierson, Ed.D., Chief, Psychological Services, Green Hill School, Washington State Department of Institutions, Chehalis, Wash.
Publication: To be published.

18-M-13 APPLICATION OF COLORS TO TECHNIQUES OF CLASSIFICATION

Purpose: To study the possibility of discerning individual personality characteristics through freely drawn pictures and reactions to the Color Gestalt Test.
Subjects: 225 juvenile delinquents, ages 14 to 20. Nondelinquent controls.
Methods: Subjects were instructed to draw anything they wanted except the objects they could see or imitate in the test situation. A sheet of paper containing a 25 x 20 centimeter square equally sectioned into 32 small triangles, was colored by subjects into any design they wanted to make. They could color more than one triangle in one color, and could ignore straight lines if they wished to make circular or elliptical designs.
Findings: Freely drawn pictures did not reflect objects in subjects immediate surroundings or local environments, and subjects were unable to explain why they had wanted to draw such pictures. Noticeable personality differences were found when subjects were grouped according to color schemes they used frequently on the Color Gestalt Test. Differences related to attitudes, intelligence, and delinquency were found in designs colored.
Duration: May 1959-May 1964.
Investigator(s): Kozo Ono, Akita Juvenile Detention and Classification Home, 1-4 Shimo Yatsuhashi, Yatsuhashi, Akita-shi, Japan. (Reported by NCCD.)

18-M-14 THE JUVENILE GANG LEADER: A SELF-PORTRAIT

Purpose: To clarify present-day conceptions of the juvenile gang leader by accumulating and analyzing a number of "autobiographies" of such leaders.
Subjects: 14 male members of juvenile gangs in Los Angeles: 9 Negroes, 4 Mexican-Americans, and 1 white, ranging in age from 14 to 21 years.
Methods: Data were obtained in tape-recorded interviews with gang leaders. Candidates for interviews were named by street-worker staff, police, parole officers, and by gang-study staff in another agency; participants in the interviews were volunteers from among the nominees. Interviews were semistructured. After transcription, the interview materials were reorganized in chronological sequence to secure autobiographical statements of the gang leaders' careers, viewpoints, and so on.
Findings: Selected materials from the project are being incorporated in the study, *The Juvenile Gang: Structure and Function as Perceived by Gang Leaders*.
Duration: December 1963-June 1965.
Investigator(s): Roger E. Rice, M.A., Research Analyst, and Stuart Adams, Ph.D., Research Director, Los Angeles County Probation Department, Los Angeles, Calif.
Publication: Report to be released by the Research Office, Los Angeles County Probation Department.

18-M-15 THE SELF-CONCEPTION AND SIGNIFICANT OTHERS OF YOUTHFUL FELONS

Purpose: It is hypothesized that the self-conception of youthful felons is a function of significant others in and out of prison.
Subjects: 55 percent of all youthful felons committed under the Federal Youth Corrections Act to the Youth Corrections Center, Lorton, Virginia.
Methods: Panel study method used in interviewing groups of prisoners at different stages in their correctional experience.
Duration: May-December 1963.
Investigator(s): William Nardini, Ph.D., Chief of Research, and Donald Clemmer, Department of Research Corrections, Institute for Criminological Research, Lorton, Va. (Reported by NCCD.)
Cooperating group(s): District of Columbia Youth Corrections Center, Lorton, Va.

18-M-16 A COMPARATIVE STUDY OF DELINQUENTS AND NONDELINQUENTS IN SPRINGFIELD, MISSOURI

Purpose: To test for significant differences between delinquents and nondelinquents with regard to their perception of persons who represent legitimate and illegitimate value systems and with regard to any difference in their self-concept in relation to the legitimate value system.
Subjects: Matched pairs of male delinquents and nondelinquents, ages 14 to 16, drawn from the public high schools in Springfield, Mo.
Methods: A modified version of the Kelly Role Construct Repertory Test and the Kuhn Twenty-Statements Test were administered individually to each person in the sample. Findings were statistically analyzed.
Findings: Research hypotheses were confirmed in each case. A significant difference was found between the delinquent and nondelinquent perception of persons who represent legitimate and illegitimate value systems. A significant difference was found in the delinquent and nondelinquent self-concept in relation to the legitimate value system.
Duration: August 1962-June 1963.
Investigator(s): Ivan Chapman (Ph.D. Candidate, University of Missouri), 2207 Virginia Ave., Springfield, Mo.

18-M-17 PLANNING AND RISK-TAKING AS VARIABLES IN JUVENILE DELINQUENCY

Purpose: To investigate whether risk-taking tendencies and degree to which future plans have been formulated are related to recidivism.
Subjects: Adolescent delinquent boys committed by a juvenile court and placed in a residential group care setting by a local public child welfare agency.
Methods: Appropriate measures of the concepts will be developed and correlated with criteria of recidivism.
Duration: February 1964-1965.
Investigator(s): Samuel C. Fulkerson, Ph.D., Associate Professor, University of Louisville, Louisville, Ky. (Reported by L. C. Carpenter, Superintendent, Louisville and Jefferson County Children's Home, Anchorage, Ky. 40001.)
Cooperating group(s): Louisville and Jefferson County Children's Home.

18-M-18 COMPARISON OF DELINQUENTS WITH THEIR SIBLINGS

Purpose: To test the following hypotheses: (1) delinquents will be more maladjusted than their nondelinquent siblings; (2) siblings of social delinquents will be less maladjusted than siblings of solitary delinquents, with siblings of mixed delinquents falling in an intermediate position; (3) social delinquents will be less maladjusted than solitary delinquents, with mixed delinquents in an intermediate position; and (4) solitary, social, and mixed delinquents will differ as to type and nature of offense committed as demonstrated in their patterns of delinquency.
Subjects: A sample of delinquent adolescent males, aged 13 to 18 years, drawn from juvenile hall of a large metropolitan county.
Methods: Minnesota Multiphasic Personality Inventory and California Psychological Inventory will be administered to each subject to measure adjustment. Various samples will then be compared on mean MMPI and CPI scores for various scales.
Duration: September 1963-September 1964.
Investigator(s): Harold Richardson, Ph.D., Associate Professor of Psychology, Julian B. Roebuck, Ph.D., Associate Professor of Sociology, San Jose State College, San Jose; and Thomas Eblen, Juvenile Hall Case Worker and Assistant Probation Officer, San Mateo County Probation Department, San Mateo, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-M-19 FAMILY AND PEER RELATIONS OF GANG DELINQUENTS

Subjects: Negro and white gang members; lower class nongang members; middle class nongang members.
Methods: Interviews; psychological tests.
Duration: May 1964-1966.
Investigator(s): Robert A. Gordon, Ph.D., Assistant Professor of Social Relations, Johns Hopkins University, Baltimore 18, Md.
Cooperating group(s): Social Science Research Council.
Publication: To be submitted to professional journals.

18-M-20 CHILDHOOD PREDICTORS OF NEGRO MOBILITY AND CRIMINALITY

Purpose: To investigate nature of interaction of class position and deviant behavior. Two hypotheses will be tested: (1) high rate of Negro crime and family disruption can largely be accounted for by low socio-economic status of Negroes; (2) obverse hypothesis, that the heavy concentration of Negroes in the lower class in metropolitan centers is a consequence of high rate of

juvenile crime and antisocial behavior of Negro boys and of Negro boys' experience with fathers who themselves have high rates of antisocial behavior expressed by desertion and nonsupport of their families.
Subjects: A sample of a total urban population of Negro boys of normal I.Q., still living in the city of their birth.
Methods: A longitudinal study evaluating the relative importance of childhood socio-economic status, childhood behavior problems, lack of a father in the childhood home in determining adult socio-economic status, and their adult arrest records. A number of social and psychiatric variables, which appear related to ability to overcome handicaps existing in childhood, will also be evaluated.
Duration: 1963-1968.
Investigator(s): Lee N. Robins, Ph.D., Research Associate Professor of Sociology, and George E. Murphy, M.D., Assistant Professor of Psychiatry, Department of Psychiatry and Neurology, Medical School, Washington University, St. Louis 10, Mo.
Cooperating group(s): National Institute of Mental Health, Public Health Sefvice, U. S. Department of Health, Education, and Welfare.

18-M-21 ADOLESCENTS LOST IN THE CITY: THE INFLUENCE ON JUVENILE DELINQUENCY OF HOUSING AND THE URBAN ENVIRONMENT

Purpose: To investigate the influence of housing, building structure, and community environment on juvenile delinquency; to conduct a statistical and typological study leading to recommendations for urban planning.
Subjects: Eight sample districts of 16 hectares each (39.5 acres) in delinquent and nondelinquent areas of the city of Lyons.
Methods: Study is based on data furnished for the Juvenile Court for Greater Lyons for the years 1956 through 1959, and data from the National Institute of Statistics and Economic Studies.
Duration: 1958-1963.
Investigator(s): M. Paul Froidevaux and staff, Centre d'Informations Urbaines et Sociales, 107 Rue Boileau, Lyons 6, France. (Reported by NCCD.)
Cooperating group(s): Institut National d'Hygiene.

18-M-22 THE FORMATION OF CRIMINAL SUBCULTURES IN THE MILIEU OF ADOLESCENTS IN MONTREAL

Purpose: To test certain hypotheses by Sellin and Sutherland on the true socio-cultural origin of deviant behavior. With the help of psycho-sociological techniques in which psychological and biological variables will be controlled, the orientation of the value systems and outlook on the world of mentally healthy juvenile delinquents will be clarified.
Subjects: Several groups of juvenile delinquents who are engaged, in differing degrees, in stable and permanent criminal careers.
Duration: June 1963-1965.
Investigator(s): Denis Szabo, D.Sc., Assistant Professor of Sociology and Anthropology, and Henri F. Ellenberger, Faculte des Sciences Sociales, University of Montreal, Montreal 26, Que. (Reported by NCCD.)
Cooperating group(s): Foundation Richelieu de Montreal; Conseil des Arts du Canada.

18-M-23 STUDY OF THE COMMUNITY CONTEXT OF DELINQUENT BEHAVIOR

Purpose: The instrumental theory of delinquency suggests that the determinants of delinquent behavior lie primarily in the patterned world of the adolescent subculture rather than in disturbed psyches or economic conditions.

This study proposes to examine the extent of the adolescent subculture in a large city, to establish its relationship to the community of which it is a part, and to develop methods for detecting delinquent populations and for distinguishing the attitudes of the habitual delinquent from those of the nondelinquent.
Duration: 1963-1965.
Investigator(s): Joseph D. Lohman, Dean, School of Criminology, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-M-24 THE JUVENILE GANG: STRUCTURE AND FUNCTION AS PERCEIVED BY GANG LEADERS

Purpose: To describe the manner in which delinquent gangs are organized and operate by using autobiographical materials from juvenile gang leaders as basic data for the description.
Subjects: 13 gang youth from various sectors of Los Angeles, predominantly minority group members, selected on basis of their willingness to serve as subjects in recorded interviews and also because of their reputations as gang leaders.
Methods: Data for project were taken from tape recordings of interviews that were transcribed verbatim. Materials relating to structure or operation of gangs were identified and abstracted for organization into a report on leaders' perceptions of characteristics of their gangs.
Findings: Los Angeles area gangs are relatively cohesive groups. Leaders tend to emerge rather than be chosen. "Intelligence" is perceived to be the most important quality possessed by gang leaders. Membership includes an active hard core numbering 10 to 25 members, and a less active contingent sometimes numbering in the hundreds. Structure is conditioned by age and size differentiation within the gang. Most gangs have a girl gang affiliate, and girls are perceived to be sources of trouble. Gangs function primarily for defensive purposes. In this rôle, they are continually harassed by the significant power structure of the community.
Duration: December 1963-June 1965.
Investigator(s): Roger E. Rice, M.A., Research Analyst, Stuart Adams, Ph.D., Research Director, and Rex Christensen, B.A., Probation Director, Los Angeles County Probation Department, Los Angeles, Calif.
Publication: Report to be released by the Research Office, Los Angeles County Probation Department.

18-M-25 ATTRIBUTIONS OF DELINQUENCY AND THEIR IMPACT ON YOUTH

Purpose: To identify the consequences that follow the attribution of delinquent definitions to boys; to study variations in these consequences as a function of characteristics of youth and of different conditions in the definitional process. Basic hypothesis is that the process of being defined as delinquent has significant effects on the youth's self-concept, aspirations, interpersonal associations, participation in delinquent behavior, and subsequent life career.
Methods: Pre-delinquent and delinquent youth will be studied longitudinally, beginning before they are so identified, and will be studied as they move through the various community agencies involved in definition and control of delinquent behavior. In addition to longitudinal research, several experimental studies will be conducted to reveal criteria used by various persons in the community (including teachers, police officers, and social workers) to identify delinquent youth. The first two years of the project will be devoted to pilot studies designed to solve certain methodological problems involved in longitudinal research.

Duration: 1962-indefinite.
Investigator(s): Irving Piliavin, D.S.W., and Joseph S. Briar, D.S.W., Assistant Professors of Social Welfare and Assistant Research Analysts, School of Social Welfare, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-M-26 A THEORY AND COMPARISON OF FEMALE AND MALE DELINQUENCY

Purpose: Comparisons of male and female delinquency show that girls have a much lower rate of delinquency than boys and are more prone to sex offenses and family offenses. This study will attempt to relate these differences to the different sex role objectives for boys and girls.
Subjects: 224 adolescents in Flint, Michigan divided into 4 groups of male and female delinquents and male and female nondelinquents, and matched for social class, age, I.Q., and school grade.
Methods: Trained interviewers used a pretested interview schedule in spring of 1961.
Findings: Findings confirm that boys strive more for social status and girls more for relational success and personal acceptance. Delinquents suffer deprivations in both areas, but female delinquents particularly have more relational problems than the other groups. An unexpected finding suggests that girls who are blocked from their social goals are more likely to become apathetic and alienated from them, while boys who are blocked in reaching their goals are more likely to seek deviant means of reaching them.
Duration: Not reported-1963.
Investigator(s): Ruth Rittenhouse, Doctoral Candidate, University of Michigan, Ann Arbor, Mich. (Reported by NCCD.)
Publication: Dissertation, University of Michigan.

18-M-27 A STUDY OF DELINQUENT TYPOLOGY

Purpose: To isolate delinquent personality types and to study the relationship of these types to recidivism, treatability, prognosis, etc.
Methods: Several approaches may be used. A large sample of personality factor profiles has been gathered and a pattern similarity coefficient (rp) between each individual and every other individual in the sample has been computed. Factor or cluster analysis will likely be employed.
Duration: October 1962-indefinite.
Investigator(s): George R. Pierson, Ed.D., Chief, Psychological Services, Green Hill School, Washington State Department of Institutions, Chehalis, Wash.
Publication: To be submitted to an appropriate journal.

18-M-28 VIOLENCE

Purpose: To investigate the many different psychological and social characteristics, operating in differing degrees and overlapping in some cases, which characterize a subgroup of boys convicted of violence.
Subjects: 94 boys, aged 16 to 20, from London and the home counties, who have been sentenced to prison, borstal, or detention centers.
Methods: Interviews with each subject. If subject and his mother agree, home visits and interviews are held. These last four to four and one-half hours.
Investigator(s): Dr. Charlotte Banks, Chairman, Department of Child Psychology, University College, Gower St., London W.C. 1, England. (Reported by NCCD.)
Cooperating group(s): Ford Foundation; Home Office.
Publication: *Howard Journal* 11:1:1-13, 1962.

18-M-29 PROJECTIVE PREDICTION OF ASSAULTIVE BEHAVIOR

Purpose: Project entails the specification of assaultive behavior by quantifying responses to two projective instruments: Rorschach and Hand Tests. Prior research has largely ignored these variables; in fact, the paucity of experimental results precludes the formulation of specific hypotheses at this time.
Subjects: 10 assaultive and 11 nonassaultive adult inmates of Southern Michigan State Prison in Jackson; 30 assaultive and 30 nonassaultive equated juvenile delinquents, referred for psychological testing by Summit County Juvenile Court in Akron, will be used in pilot and exploratory studies. Approximately 30 assaultive and 30 nonassaultive matched current referrals to Summit County Juvenile Court will be selected for Rorschach cross validation and Hand test validation.
Methods: Rorschach protocols for all groups will be scored using the Fisher and Cleveland "Barrier" and "Penetration" content scales. Hand Test will be used in an attempt to predict assaultive behavior using just the Rorschach cross-validation sample.
Findings: Preliminary findings suggest that only the Hand Test may be able to reliably discriminate assaultiveness from nonassaultiveness.
Duration: June-September 1963.
Investigator(s): John A. Popplestone, Ph.D., Assistant Professor; Edwin E. Wagner, Ph.D., Assistant Professor; and Roger E. Hawkins, Teaching Assistant, Department of Psychology, University of Akron, Akron, Ohio. (Reported by NCCD.)
Cooperating group(s): Summit County Juvenile Center; Southern Michigan State Prison, Jackson; National Science Foundation.

18-M-30 PREDICTION AND MEASUREMENT OF PERSONALITY CHANGES IN BOYS COMMITTED AS DELINQUENTS

Purpose: To measure changes in identifications of delinquent boys as result of a stay in treatment-oriented training school.
Subjects: 49 delinquent boys.
Methods: Measures of identification on Kelly's Role Construct Repertory Test compared before and after institutionalization.
Findings: Identification with authority figures increases, as well as ability to identify with others; identification with delinquents decreases. Greatest positive changes take place in boys showing most pathology when committed.
Duration: August 1963-August 1964.
Investigator(s): Donald Lederman, Ph.D., Chief Psychologist, James Hurd, M.A., and William Naylor, M.A., Psychologists, Iowa Training School for Boys, Eldora, Iowa.
Publication: To be published in Crime and Delinquency.

18-M-31 PILOT STUDY OF PERSONALITY VARIABLES FOR USE IN PREDICTION AND FOLLOW-UP OF POST-TREATMENT LIFE ADAPTATION OF DELINQUENT BOYS

Purpose: (1) To test whether certain personality characteristics evolved through experience in past research at Wiltwyck have predictive value for future life adaptation of Wiltwyck's boys; (2) to set in motion an inquiry which may suggest additional personality variables and to evolve a set of criteria for assessing life adaptation of children after treatment; (3) to accomplish a pilot follow-up study of 25 boys leading to development of a proposal for a larger project designed to test whether predictive criteria checked out in the pilot study are valid over a greater length of time, and whether favorable changes observed in children after treatment still hold after five years; and (4) to begin development of test instruments designed to tap personality variables in question.
Subjects: Children in residential treatment and their families.

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Methods: Current testing techniques will be adapted, and a beginning made toward development of additional techniques designed to tap the variables in question. Cross-sectional diagnosis using techniques as they are designed and clinical diagnosis will be done at beginning and end of child's stay in treatment. It is proposed that follow-up diagnosis, using a format to be developed, will be done at two and five years after termination of child's and family's treatment, depending on success of effort in pilot project to design a larger project and on the acquisition of funds for that expanded effort.
Duration: June 1964-July 1965 (pilot project).
Investigator(s): Edgar H. Auerswald, M.D., Clinical Director, Wiltwyck School for Boys, Inc., 260 Park Ave. S., New York 10, N. Y.
Cooperating group(s): James M. Wolfe Fund.
Publication: Papers to be published when appropriate.

18-M-32 VALIDATION OF ADULT PREDICTION TABLES ON THE 500 DELINQUENTS OF UNRAVELING JUVENILE DELINQUENCY DURING THE AGE SPAN 21-31

Subjects: 500 delinquents and 500 matched nondelinquents of Unraveling Juvenile Delinquency (Harvard University Press, 1950).
Methods: In follow-up study, tables dealing with prediction of behavior on probation, on suspended sentence, in reformatories, in prisons, in jails, in houses of correction, and on parole have been examined; predicted behavior has been checked with the actual behavior. The method of checking follows the same pattern as that utilized in the checking of series of tables for use by juvenile courts as originally published in volume Juvenile Delinquents Grow Up (The Commonwealth Fund, 1940).
Duration: November 1962-1964.
Investigator(s): Sheldon Glueck, Ph.D., Roscoe Pound Professor of Law, and Eleanor T. Glueck, Ph.D., Research Associate in Criminology, Law School, Harvard University, Cambridge 38, Mass.
Cooperating group(s): Harvard Law School; Ford Foundation; several private foundations.
Publication: Federal Probation, 20:4, December 1956; Essays in Jurisprudence, In Honor of Roscoe Pound, Indianapolis: The Bobbs-Merrill Co., 1962; Criminal Careers in Retrospect, New York: The Commonwealth Fund, 1943; Predicting Delinquency and Crime, Cambridge: Harvard University Press, 1959.

18-M-33 STUDY ON PREDICTION OF RECIDIVISM BY RORSCHACH TEST

Purpose: To attempt to predict, by means of the Rorschach, a second delinquent act before it is committed.
Subjects: 300 children committed to the Nagasaki Juvenile Detention and Classification Home between April 1960 and March 1962 were selected at random. Only mentally defective children were excluded.
Methods: Subjects are divided into a group for whom the prognosis is bad and a group for whom the prognosis is good as determined by Rorschach results. Subjects are followed after release to determine rates of recidivism for the groups.
Duration: April 1960-April 1964.
Investigator(s): Toshiko Tsuchiya, 2-22 Nagahama Town, Fukuoka City, Japan. (Reported by NCCD.)
Cooperating group(s): Nagasaki Juvenile Detention and Classification Home; Nagasaki Family Court.

18-M-34 YOUTH OPPORTUNITIES BOARD OF GREATER LOS ANGELES

Purpose: To demonstrate effectiveness of particular programs or combinations of programs in reducing delinquency and other expressions of youth failure; to demonstrate the operational feasibility of intervention aimed at modifying social situations and structures through which youth failure occurs.
Subjects: Disadvantaged youths to the age of 21 years, living in South Central Demonstration Area.
Methods: A demonstration project characterized by "action-research", involving a close meshing of theory, action, test and redesign. There are currently two Youth Training and Employment Programs in operation, serving 16 to 21 year age group. In addition, there are two programs in the Los Angeles City and County Schools which will be joined in the fall 1964, by several more new programs. These programs, along with those proposed in the fields of corrections, health, mental health, training, community development and recreation, will be evaluated for further planning and generalized application of prototypes of these programs to other communities with severe youth failure problems.
Duration: April 1962-indefinite.
Investigator(s): Alfred P. Parsell, Ph.D., Research Director, Youth Opportunities Board of Greater Los Angeles, 220 North Broadway, Los Angeles 12, Calif.
Cooperating group(s): Welfare Planning Council, Los Angeles Region; System Development Corporation.

18-M-35 EXAMINATION OF ACTIVITIES AND IMPACT OF THE DELINQUENCY PREVENTION BUREAU OF THE CITY OF BOSTON

Methods: Structured reporting forms are employed to obtain data on detached worker's contacts with juveniles over a one-year period. Information on size of group, duration of contact, reason for contact and location of contact has been analyzed. Estimates are made of the delinquency experience based upon police warnings and arrests of boys in contact with detached workers in comparison with a study group of similar age and neighborhood of residence.
Duration: January 1961-June 1963.
Investigator(s): Howard E. Freeman, Ph.D., Associate Professor of Social Research, and Stanton Wheeler, Ph.D., Florence Heller School for Advanced Studies in Social Welfare, Brandeis University, Waltham 54, Mass. (Reported by NCCD.)
Cooperating group(s): Youth Activities Bureau of Boston; Youth Service Board of Commonwealth of Massachusetts.

18-M-36 STAREHE BOYS' CENTRE, NAIROBI

Purpose: An attempt to find an efficient and inexpensive solution to problems of juvenile delinquency and vagrancy in the city of Nairobi. Present research attempts to measure the effects of a therapeutic program on participants' attitudes and behavior.
Subjects: 430 boys, aged 7 to 18 years, of whom 200 are in residential care and 230 attend on a daily basis.
Methods: Establishment of a "climate" conducive to reform, extensive use of peer influences, the alleviation of physical hardship and destitution which are sometimes a factor in delinquency, the provision of occupation including schooling and casework services.
Findings: Preliminary results indicate that less than 6 percent per annum are involved in any further trouble after entry into program.
Duration: June 1959-continuing.
Investigator(s): G. W. Griffin, P. O. Box 30397, Nairobi, Kenya. (Reported by NCCD.)
Cooperating group(s): Child Welfare Society of Kenya; Save the Children Fund,

Kenya Branch; Kenya Shell Oil Company; British Petroleum Company; Nairobi City Council; Government of Kenya; Ford Foundation.

18-M-37 COMMUNITY COSTS OF SERVICED AND UNSERVICED GANGS

Purpose: An attempt to ascertain whether the provision of service to delinquent juvenile gangs by a street worker program reduces total of law enforcement, court, and correctional costs incurred by the community in its interactions with gang members.
Subjects: 76 delinquent gang youth from one of the deprived sectors of central Los Angeles. These youth comprise two groups, one serviced, the other unserviced. The two groups are essentially alike on social and personality characteristics. By what appears primarily chance, one group was chosen as a subject for a delinquency prevention program.
Methods: Rosters of the two groups were obtained during an area survey by the Group Guidance Office of the Los Angeles County Probation Department. Histories of members of both groups are being documented in detail to ascertain all law enforcement contacts, court actions, and correctional services experienced. Actions and services will be translated into economic terms by use of current estimates of unit and monthly costs. Comparisons will be made of average annual expenditures on group members to ascertain the reasons for any apparent differences in correctional costs.
Findings: Prior to introduction of street worker program, the 33 boys in the unserviced gang had cost the community $121,921 in correctional expenditures. The 43 boys in the other gang had cost $166,882. The averages were $3,695 and $3,880 per boy, respectively. Average costs following the introduction of the street worker program remain to be ascertained.
Duration: May-September 1964.
Investigator(s): Roger E. Rice, M.A., Research Analyst, and Stuart Adams, Ph.D., Research Director, Los Angeles County Probation Department, Los Angeles, Calif.
Publication: To be released by the Research Office of the Los Angeles County Probation Department.

18-M-38 DELINQUENCY STUDIES PROGRAM

Purpose: To learn more about variety of official orientations and actions toward juveniles, the bases of these variations, and their consequences for juveniles and their communities. In addition to several theoretical inquiries, field studies will include: (1) an investigation of the relation between police and probation handling of juveniles in two counties; (2) police encounters with juveniles and a longitudinal study of a juvenile cohort from period before their contact with the law; (3) official contacts and careers of members of juvenile gangs; (4) a comparative analysis of decision-making in the juvenile court; (5) study of staff-girl inmate relations in a detention hall; and (6) exploration of treatment programs at a correctional facility for older youths.
Duration: September 1962-August 1965.
Investigator(s): Sheldon L. Messinger, et al., Center for the Study of Law and Society, University of California, Berkeley 4, Calif. (Reported by NCCD.)
Cooperating group(s): University of California, Davis; University of California, Riverside; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-M-39 A STUDY OF TWO POSSIBLE SOURCES OF COMMUNICATIONS BREAKDOWN IN JUVENILE DELINQUENCY WORK

Purpose: To identify semantic differentials involved in breakdown of communications between juvenile delinquents and juvenile court judges, probation workers, and police officers.
Methods: Osgood Semantic Differential Instrument administered to subjects and controls.
Duration: May 1963-continuing.
Investigator(s): George Shapiro, and Nathan G. Mandel, Ph.D., Director of Research, State Department of Corrections, 310 State Office Bldg., St. Paul, Minn. (Reported by NCCD.)
Cooperating group(s): Department of Speech, University of Minnesota; Hennepin County Court Services; Ramsey County Probation Department.

18-M-40 A STUDY OF INDIVIDUALS WHO HAVE BEEN SENTENCED TO PRISON BY THE KALAMAZOO COUNTY CIRCUIT COURT FROM 1958 THROUGH 1962

Purpose: To test certain assumptions about individuals sentenced to prison by the Kalamazoo County Circuit Court. The assumptions are: (1) a large majority of the individuals had a previous juvenile delinquency record; (2) a large majority had a previous juvenile commitment record to a boys training school; and (3) a large majority did not have a high school education.
Subjects: 363 persons sentenced to prison during period 1958 through 1962.
Methods: Statistical analysis of data collected from Kalamazoo County Adult Probation Department, including age, race, education, marital status, employment status, offense, previous record and juvenile record.
Findings: Indications are that the first and second hypotheses are unfounded. The third hypothesis was supported and is assumed valid.
Duration: 1963.
Investigator(s): Harold W. Dyer, Juvenile Officer, Kalamazoo County Juvenile Court, Kalamazoo, Mich. (Reported by NCCD.)
Publication: Six page mimeographed report by investigator, 1963.

18-M-41 ESSEXFIELDS GROUP REHABILITATION CENTER

Purpose: To ascertain the effectiveness of a community based short-term treatment center for adolescent offenders.
Subjects: Boys, 16 and 17 years, residing in Essex County, New Jersey, and adjudicated delinquent by Essex County Juvenile Court.
Methods: Establishment of an experimental and three control groups. A comparison of recidivism and personality profile as measured by MMPI will be made between subjects placed in Essexfields Group Rehabilitation Center, Annandale State Reformatory, New Jersey State Residential Centers, and boys placed on straight probation.
Duration: April 1961-December 1965.
Investigator(s): Albert Elias, M.A., Superintendent, Bordentown State Reformatory, Bordentown, N. J., and Richard Stephenson, Ph.D., Chairman, Department of Sociology, Rutgers, The State University, New Brunswick, N. J. (Reported by Saul Pilnick, Executive Director, Essexfields Group Rehabilitation Center, 180 Clinton Ave., Newark, N. J.)
Cooperating group(s): Essex County Juvenile Court; Essex County Probation Department; New Jersey State Department of Institutions and Agencies; Ford Foundation.
Publication: Monographs, professional papers, and a book are planned.

18-M-42 EVALUATION OF JUVENILE REHABILITATION PROGRAMS

Purpose: To determine effects of juvenile rehabilitation programs upon youngsters committed to the Department of Institutions; to determine means by which existing programs can be improved.
Subjects: Children committed to juvenile rehabilitation facilities of the Department of Institutions.
Methods: (1) Detailed information collected concerning background of juveniles prior to commitment. (2) Psychological and educational achievement tests administered and diagnosis of institutional staff reviewed. (3) Data collected on the services provided by the institutions to each child. (4) Factors listed above correlated with parole behavior of juvenile and significant factors relating to change will be determined.
Duration: October 1963-indefinite.
Investigator(s): Evan A. Iverson, Ph.D., Supervisor, Duane W. Sturges, Research Analyst, and Gloria K. Clemmons, Statistician, Research and Program Analysis Section, Washington State Department of Institutions, Olympia, Wash. (Reported by Sidney Coleman, Supervisor, Division of Administrative Operations, Washington State Department of Institutions.)
Publication: To be published in Research Review, Department of Institutions.

18-M-43 A REFINEMENT IN THE USE OF THE SCHOOL MOTIVATION ANALYSIS TEST (SMAT) AS A PREDICTOR OF SCHOOL ACHIEVEMENT IN DELINQUENT BOYS

Purpose: Earlier work in the prediction of school achievement by Pierson, Barton, and Hey demonstrated that both components of the drive factors on the SMAT (integrated and unintegrated) each yield very high and significant relationships between predicted criteria. This study attempts to correlate both components to obtain an even higher multiple correlation.
Methods: Pearson Product-Moment Coefficients and the Specification Equation. Eleven factors from each component were chosen for inclusion in the new equation.
Findings: A multiple correlation of .92 was obtained, unquestionably the highest which has been reported to date. With the new equation, prediction of academic achievement of delinquent boys is now possible with an unprecedented degree of accuracy.
Duration: October 1963-December 1964.
Investigator(s): George R. Pierson, Ed.D., Chief, Psychological Services, Green Hill School, Washington State Department of Institutions, Chehalis, Wash.
Publication: To be published in Educational and Psychological Measurements in 1964.

18-M-44 THE PREDICTION OF ACHIEVEMENT IN VOCATIONAL TRAINING OF DELINQUENT BOYS

Purpose: To determine best means of predicting aptitude of delinquent boys for training in vocational shops.
Subjects: 56 students assigned to shops in the vocational training program at Green Hill School in 1963.
Methods: Pearson Product-Moment Coefficients were computed between each of the 14 personality factors and instructor's ratings. Tests were administered during boy's first week in institution; ratings were made following boy's departure from institution. Data were prepared for computer analysis.
Findings: A multiple correlation of .65 has been secured (significant at the .01 level) indicating that personality variables play an extremely important role in success in vocational training. Tentative findings seem to indicate that about 42 percent of variance in instructor's ratings are determined by personality factors alone. This, if combined with ability measurements, would lead to extremely high multiple correlations.

Duration: January-March 1964.
Investigator(s): George R. Pierson, Ed.D., Chief, Psychological Services, Green Hill School, Washington State Department of Institutions, Chehalis, Wash.
Publication: An article is planned.

18-M-45 A SELF-INSTRUCTIONAL PROGRAM FOR YOUTHFUL OFFENDERS

Purpose: To develop a low-cost, self-instructional program at Draper Correctional Center that will incorporate all educational, vocational, and rehabilitation training of the prison into its operation; to design, develop, and utilize a self-instructional curriculum more applicable to the educational, occupational, and social needs of youthful offenders in a prison society, both with regard to that society and the one they are preparing to enter outside; to evaluate the program both with respect to performance in prison and following release; and to develop a useful and adequate "blueprint" that can be easily adapted to needs of other institutions.
Duration: May 1962-April 1965.
Investigator(s): John M. McKee, Ph.D., Project Director, and John C. Watkins, Warden, Draper Correctional Center, Elmore, Ala.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-M-46 USE OF PROGRAMMED INSTRUCTION WITH DELINQUENTS: A PILOT STUDY

Purpose: To test the feasibility of using programmed instruction with mentally disturbed, delinquent, or problem children at Minnesota State Training School for Boys Reception Center.
Duration: August 1962-May 1963.
Investigator(s): Gilbert Westreich, Wentworth Quast, Ph.D., Assistant Professor of Psychiatry, Medical School, University of Minnesota, Minneapolis, and Nathan G. Mandel, Ph.D., Director of Research, State Department of Corrections, 310 State Office Bldg., St. Paul, Minn. (Reported by NCCD.)

18-M-47 CHILDREN'S VIEWS OF THE JUVENILE COURT AND ITS AUXILIARY SERVICES

Purpose: To learn children's views of the various policies, practices, and institutions constituting the court process with particular attention to the impact of certain practices of the staff. Included will be such matters as problems of communication, confidentiality of information, fulfillment of expectations transmitted by personnel, sense of fairness or injustice, etc.
Methods: Taped interviews with children, singly or in groups, which will include certain standard areas of inquiry. Responses will be systematized and analyzed, including differentiation made on basis of position of child in the court process. Excerpts from numerous interviews will be logically arranged to illustrate children's view of certain practices.
Duration: July 1963-July 1965.
Investigator(s): Donald T. Anderson, Educational Director, and Robert H. Barstow, Children's Charter of the Juvenile Courts of Michigan, Inc., 703 Westnedge Ave., Kalamazoo, Mich. 49007. (Reported by NCCD.)
Cooperating group(s): Michigan Probate and Juvenile Court Judges Association; Michigan County Juvenile Officers Association; Michigan Juvenile Court Officers Association; Kellogg Foundation.

18-M-48 THE APPLICATION AND SUCCESS OF THE INDETERMINATE PUNISHMENT OF YOUTH IN THE COUNTY COURT DISTRICT OF KLEVE

Purpose: To determine whether there are particular characteristics of offense or offender which predispose the court to a sentence of indeterminate punishment. This will be followed by an investigation into the possibility of setting standards for decisions on the duration of pronounced punishments, and later by an investigation of the amount of recidivism of juveniles sentenced to indeterminate punishment during the time of their parole.
Subjects: 90 juveniles sentenced to indeterminate punishment in the years 1954 to 1961.
Duration: Summer 1962-continuing.
Investigator(s): Klaus Puruckherr and Gerhard Kielwein, Institute of Criminology, University of the Saar, 66 Saarbrucken 15, Stadtwald, Germany. (Reported by NCCD.)

18-M-49 DETERMINATE PUNISHMENT OF YOUTH IN THE SAAR

Purpose: To investigate the applicability and effectiveness of the determinate punishment of youth in the Saar. To find decisive factors for success or recidivism and the prognostic significance of these factors.
Subjects: All male juveniles (N=180) who were dismissed from the Saar Youth Reformatory between 1957 and 1961, after having partially or completely served a determinate sentence.
Methods: Inquiry into personality, environmental circumstances, life history, and various criminogenic factors apparent in these areas of investigation. Manner and method of their criminological activities were also investigated. Further research was done on effects of attempts at re-education undertaken during their sentences, on their conduct during incarceration and after release. Official state, institution, court, and parole records formed the basis for data collection.
Findings: Determinate punishment of youth appears to be successful mainly with those minor violators whose criminality can be traced to detrimental environmental influences or adolescent developmental disturbances. As practiced today, the punishment under investigation appears to be a complete failure with offenders with certain particular psychopathic disturbances. Establishment of the presence or absence of such character anomalies is decisive for prognosis.
Duration: October 1961-spring 1964.
Investigator(s): Richard Bellon and Gerhard Kielwein, Institute of Criminology, University of the Saar, 66 Saarbrucken 15, Stadtwald, Germany. (Reported by NCCD.)

18-M-50 GROUP COUNSELING WITH PROBATIONERS IN THE JUVENILE COURT SETTING

Purpose: (1) To provide juvenile probationers with an opportunity to examine their antisocial behavior with critical judgment, to recognize that their problems are not unique, to share in the free expression of thoughts and feelings, and to participate in the development of solutions to common problems that will prove personally satisfying and socially acceptable; and (2) to provide probation officers in the juvenile court setting with a treatment technique that will facilitate more effective handling of large caseloads than the sole use of individualized casework techniques would permit.
Subjects: First offenders, 15 to 18 years of age, who are not co-delinquents, who have been placed on probation by the court, and whose needs and abilities indicate suitability for treatment in a group setting.
Methods: Program is not designed to provide therapy reaching to a fundamental depth of personality; instead, it deals on a more superficial level in an effort to achieve satisfactory functional adjustment. First program evaluation

is to be made in April 1964.
Duration: April 1963-continuing.
Investigator(s): Frederic L. Faust, ACSW, Director of Court Services, and staff, Franklin County Court of Domestic Relations, 50 East Mound St., Columbus, Ohio 43215. (Reported by NCCD.)

18-M-51 AN EVALUATION OF A JUVENILE COURT RESOURCE UNIT

Purpose: To determine if a resource unit, featuring coordination of independent community agencies, can assist a juvenile court in keeping children referred to it out of further trouble; to determine whether any measurable changes in personality or attitudes can be discovered and related to behavioral changes.
Subjects: First offenders under 14 referred to the Family Court from the Providence area.
Methods: Comparisons will be made between experimental (Resource Unit) and control groups on recidivism data for the year prior to and following adjudication. Comparison of scores on a test battery comprising the Semantic Differential, Self-Concept Scales, Word Association Test, and Children's Manifest Anxiety Scale before adjudication and one year later will also be made.
Duration: September 1963-August 1966.
Investigator(s): Hector Jaso, M.D., Director, and Kennison T. Bosquet, Sc.M., Research Director, Providence Child Guidance Clinic, Providence, R. I.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results to be published in psychiatric and psychological journals.

18-M-52 GROUP THERAPY PROJECT

Purpose: To test the efficacy of a group psychotherapy program in a juvenile court setting.
Subjects: 12 adolescent delinquent males. Later groups may include females.
Methods: Attendance at group sessions is mandatory by court order. Authority of court is an inherent part of program. An attempt is made to remove therapeutic personnel from as much of the authoritarian aspects of the probation plan as possible in order to develop an atmosphere of trust and understanding. Group is limited to eight members who attend once a week for one hour. As members are discharged, new selections are made.
Duration: July 1962-continuing.
Investigator(s): John J. Mayer, Director of Social Services, Cuyahoga County Juvenile Court, 2163 East 22nd St., Cleveland 15, Ohio. (Reported by NCCD.)

18-M-53 YOUTH STUDIES CENTER-BOYS REPUBLIC HALFWAY HOUSE EXPERIMENT

Purpose: (1) To test series of theoretical assumptions regarding a community versus an institutional approach to change (once having gone through a series of developmental stages in which increasing responsibility is assumed, offenders will be more inclined to have a group and personal investment in supporting law-abiding behavior); (2) to carefully examine the change process itself.
Subjects: Habitual incarcerated delinquents, 15 to 17 years.
Methods: Subjects are randomly selected and removed arbitrarily from an institution to the halfway house approximately one year before ordinary release. Group techniques will be used in establishing a small community of peers who themselves can exert controls over and solve problems for one another.
Duration: February 1964-1967.
Investigator(s): LaMar T. Empey, Ph.D., Director, Youth Studies Center,

University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): Boys Republic; Rosenberg Foundation.
Publication: To be published in appropriate journals.

18-M-54 CHILDREN COMMITTED TO STATE TRAINING SCHOOLS BEFORE THEIR TWELFTH BIRTHDAY: AN EVALUATION OF A PROJECT

Purpose: A description and analysis of a program directed toward finding suitable resources for very young children now being sent to Maryland training schools.
Findings: Long-range value is questionable in view of high recidivism, suggesting that the program cannot be effective without more intensive services.
Duration: 1962-December 1963.
Investigator(s): John C. Smedley, ACSW, State Department of Public Welfare, 301 W. Preston St., Baltimore, Md. 21201. (Reported by NCCD.)
Publication: Study of Children Under 12 Years of Age Committed to Training School, Baltimore: Maryland State Department of Public Welfare, 1957 (20 pp., mimeographed).

18-M-55 PEER AND STAFF INFLUENCE ON DELINQUENT GIRLS' ATTITUDES TOWARD AND USE OF A CORRECTIONAL INSTITUTION

Purpose: To determine which persons in an institution for delinquent girls are seen by the girls as having the greatest influence on the development of their attitudes towards staff power.
Subjects: 50 disturbed, delinquent girls, ages 13 to 18, in residential treatment at Los Palmas School for Girls, Los Angeles. Sample included all girls in the Intake (10) and Release Cottages (10), plus 30 girls from three "open campus" cottages.
Methods: Each girl was seen once for a one to one and one-half hour semi-structured interview. Interviews were tape recorded and were conducted over a two and one-half week period.
Duration: September 1962-June 1964.
Investigator(s): Helen Northen, Ph.D., Professor, Rose Green, M.S.S., Lecturer, Sara Maloney, D.S.W., Associate Professor, and Harvey Bertcher, School of Social Work, University of Southern California, Los Angeles, Calif. 90007. (Reported by NCCD.)
Publication: Doctoral thesis submitted to University of Southern California.

18-M-56 STUDY OF INTELLIGENCE, ACHIEVEMENT, AND ADJUSTMENT OF DELINQUENT BOYS IN TRAINING SCHOOL

Purpose: To determine the relationship of intelligence to achievement and adjustment of boys at Eastern Carolina Training School, Rocky Mount, N. C. Specific hypotheses are: (1) that significant relationships exist between intelligence and achievement; and (2) that no significant relationship exists between intelligence and mental health of boys at Eastern Training School.
Subjects: 160 white juvenile males who entered Eastern Carolina Training School between July 1, 1961 and June 30, 1962. Mean age was 14.5 years; mean and median I.Q. was 85.
Methods: WISC intelligence quotients, grade equivalent scores on each of the six subtests of the Standard Achievement Tests, paragraph meaning, word meaning, spelling, language, arithmetic reasoning, arithmetic computation and mental health analysis scores were collected for each subject. Scores were converted to standard scores from which a correlation coefficient was computed between I.Q. and achievement, and I.Q. and mental health analysis. The Pearson

Product Moment Machine Formula was used for finding the correlation coefficients. Findings: Highly significant relationship was found to exist between intelligence and achievement. While the relationship between mental health and intelligence was not found to be as high, it nevertheless was significant (.31). Further implications were: (1) delinquents do better on nonverbal than verbal tests; (2) delinquents do poorly on tests that draw upon knowledge and skills gained from school studies; (3) low intelligence is not as much a factor in delinquency as is a lack of scholastic achievement; and (4) the mental health of the typical delinquent is poor.
Duration: September 1962-May 1963.
Investigator(s): Charles G. Morehead, D.Ed., Professor, Harold M. Corter, Ph.D., Professor of Psychology, Horace S. High, and Roy Nels Anderson, Ph.D., Head, Department of Occupational Information and Guidance, North Carolina State College, Raleigh, N. C. (Reported by NCCD.)

18-M-57 PEER CULTURE AMONG INSTITUTIONALIZED DELINQUENT GIRLS

Purpose: To explore the effects of participation in a peer culture pattern on the part of young, institutionalized delinquent girls at a state training school. Pattern involves the assumption by girls of fantasy familial roles with respect to each other; participation in the inmate culture, while extensive, is by no means universal.
Subjects: Institutionalized delinquent girls, 12 to 17 years of age.
Methods: (1) Participant observation to observe structure of inmate social relationships in which cultural pattern is embedded; (2) development and validation of rating scale procedures for assessment of levels of participation in the culture; (3) a school career study designed to explore relationship between institutional "success" as defined by staff and participation in the culture; and (4) a follow-up study to assess subsequent effects of participation in the pattern on the part of girls returned to the community.
Duration: September 1963-September 1964.
Investigator(s): Romolo Toigo, Ph.D., Bureau of Social Science Research, 1424 16th St., N. W., Washington, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-M-58 MEASUREMENT OF THE ATHLETIC DEVELOPMENT OF JUVENILES DETAINED IN A JUVENILE DETENTION AND CLASSIFICATION HOME

Purpose: To study the athletic development of juveniles in a detention and classification home in relation to intelligence, personality type, character, delinquency, and as an aid in their diagnosis and treatment.
Findings: Compared with athletic development of junior and senior high school pupils, subjects were inferior in equilibrium and coordination. No significant differences were found between groups in the standing broad jump and ability to learn physical exercises.
Duration: May 1962-not reported.
Investigator(s): Makio Katsurajima, Miyazaki Juvenile Detention and Classification Home, 3-31 Tsurushimacho, Miyazaki-shi, Miyazaki Pref., Japan. (Reported by NCCD.)

18-M-59 ADJUSTMENT TO COLOR IN A JUVENILE DETENTION AND CLASSIFICATION HOME

Purpose: To study effects of room color on male delinquents in reference to color preferences and relation between color preferences and personality.
Subjects: 350 male delinquents.

Methods: Subjects were divided into groups of 50 each and placed in rooms painted in shades varying from weak cool color to strong warm color.
Findings: Color preference in delinquents differs from that of nondelinquents. Delinquents prefer yellow, white, and purple to blue. While those who prefer such warm colors as yellow have low intelligence and antisocial character problems, those who prefer purple and achromatic colors such as black or gray show character problems of a rather neurotic nature. Room which has best effect on delinquents, whatever their preferences, is of a weak cool color; the room in which they can stay without consciousness of color is color-conditioned by mainly warm colors.
Duration: May 1962-December 1963.
Investigator(s): Masaharu Takahashi, 2-136 Nakamachi, Nerima-Ku, Tokyo, Japan. (Reported by NCCD.)
Cooperating group(s): Tokyo Juvenile Detention and Classification Home.
Publication: Studies of Color, Vol. 10, No. 2, 1963, published by Color Research Institute.

18-M-60 TREATMENT OF JUVENILE OFFENDERS IN A JUVENILE CORRECTIONAL INSTITUTION AND ITS RELATIONSHIP TO PREPARATION FOR ADJUSTMENT TO NORMAL LIFE

Purpose: Study is based on material collected between 1954 and 1962 in the reception division of a juvenile institution where treatment methods are not as effective as one could hope. Hypothesis to be tested is that the reason treatment methods are not effective is that prisoners are only conforming to staff expectations and are not actually changed for the better by the treatment methods.
Methods: Annual groups of approximately 1,000 discharged prisoners will be observed longitudinally for a period of five to seven years with respect to recidivism.
Duration: May 1962-continuing.
Investigator(s): Alexander Bohm, M. Neulandt, and Dr. Albert Krebs, Wilhelmstrasse 24, Wiesbaden, Germany. (Reported by NCCD.)
Cooperating group(s): Ministry of Justice of the State of Hessen; Correctional Institution for Juveniles at Rockenberg.

18-M-61 EVALUATION OF THE EFFECT OF CORRECTION

Purpose: To compare the results of psychometric tests taken before the delinquents entered a correctional institution with one taken after they had undergone treatment.
Subjects: 31 boys from the Takamatsu Classification Home.
Methods: Group Rorschach test, modified Harrower's Large Scale, Yatabe-Guilford Personality Inventory, and Sentence Completion Test administered to subjects.
Findings: Test results showed an increase in mental activity and a stabilization of emotion, a decrease in inferiority feelings, and an increase in objectivity. Social adaptation was seen to increase. Feelings of mistrust of adults and neighbors seemed to increase.
Duration: April 1962-April 1964.
Investigator(s): Taneo Ogura, 87-1 Fujizuka-cho, Takamatsu-shi, Kagawa-ken, Japan. (Reported by NCCD.)
Cooperating group(s): Shikoku Reform and Training School; Matsuyama Reform and Training School; Takamatsu Juvenile Detention and Classification Home.

18-M-62 PILOT STUDY: PRISON IBM UNIT AS RESEARCH RESOURCE

Purpose: To exploit punch card information on all prisoners of a statewide prison system as means of drawing a stratified sample on basis of age, race, and recidivism; to evaluate differences between young prisoners and older prisoners in terms of prison behavior as indicated by infractions of prison rules.

Subjects: 490 male felons, ages 14 and above, selected from a universe of 5,700 male felons.

Methods: Stratified sample drawn from total group of felons; schedules were completed by research clerks to obtain more specific data on selected sample from prisoner record jackets.

Findings: Partial: infraction rates are highest for youthful prisoners (ages 14 to 20), and decline with increasing age. As a whole, whites have uniformly higher infraction rates than Negroes for all age groups. However, racial differences are least apparent for ages 14 through 20 and above 30 years. Negro recidivists in the 14 to 20 age range have higher infraction rates than their white counterparts; remarkably high rates are found for fighting and assault and for relatively minor violations of social etiquette. This suggests that young Negro recidivists differ markedly from older Negro recidivists in their deviation from the traditional pattern of conformity among Negro prisoners.

Duration: May 1962-May 1964.

Investigator(s): Elmer H. Johnson, Ph.D., Professor of Sociology, North Carolina State College of the University of North Carolina, Raleigh, N. C.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Mimeographed report; article for journal publication.

18-M-63 DECISION MAKING IN ALLOCATING JUVENILE PAROLEES TO ALTERNATIVE TREATMENTS

Purpose: An exploratory pilot study to identify relative frequency with which empirically derived attributes are cited as influencing decision to allocate juvenile parolees to intensive casework treatment or regular parolee supervision; to specify, in terms of action decisions, the initial process of parole work; later, to explore extent to which leading identified factors influencing decisions to allocate juvenile parolees to alternative treatments coincide with those regarded as salient by practitioners themselves; finally, to examine relationship between allocation decisions and measures of recidivism.

Methods: A detailed content analysis of allocation decisions reported on an open-ended, standardized form is employed for inducing relative frequency of attributes cited as determining decision. Units of analysis are identifiable attributes of parolees and individual members of their families, including both verified acts, professional judgments, and standardized measurements. Unit of enumeration is a tally of distinct themes (i.e., number of times intelligence is cited as distinct from I.Q. measurements; number of times parent-child interaction is cited as distinct from quality of relationship itself). Second stage of study will employ a questionnaire with items derived from findings of content analysis.

Findings: Present findings indicated in mimeographed Eighth Annual Report of New York State Training Schools for Boys, Home Service Bureau; future progress reports to be included in subsequent annual reports.

Duration: April 1964-1965.

Investigator(s): Staff, New York State Training Schools for Boys, Home Service Bureau, New Hampton; Herman Piven, D.S.W., Associate Professor, and Arden E. Melzer (Doctoral Candidate), Assistant Professor, Graduate School of Social Work, New York University, New York, N. Y.

Cooperating group(s): New York State Department of Social Welfare.

18-M-64 EVALUATION TOOLS AND PROCEDURES: THEIR DEVELOPMENT AND APPLICATION TO THE TRAINING CURRICULA OF PROFESSIONAL SCHOOLS AND YOUTH SERVICE AGENCIES

Purpose: (1) To formulate a number of central issues problematic to probation and parole practice; (2) to identify the diverse solutions being advocated for resolution of these work problems; (3) to construct and employ measuring instruments to assess influence of variant agency structures on practitioner orientation; and (4) to construct and employ measuring instruments to assess impact of training and orientation on their work with delinquent clients.
Subjects: Graduate students in professional schools, casework and criminology teachers, probation and parole practitioners, and delinquent clients, aged 14 to 20.
Methods: Questionnaires and structured interviews.
Duration: June 1962-December 1965.
Investigator(s): Herman Piven, D.S.W., Associate Professor, Abraham Alcabes, and Arden Melzer (Doctoral Candidate), Assistant Professor, Graduate School of Social Work, New York University, New York, N. Y.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Monograph and articles to be published.

18-M-65 THE EFFECTS OF CHLORDIAZEPOXIDE (LIBRIUM) ON ANXIETY AND HOSTILITY LEVELS OF ASOCIAL AND DELINQUENT ADOLESCENTS

Purpose: To study the immediate effect of a small oral dose of chlordiazepoxide (20 mg.) on the anxiety and hostility levels of a group of asocial delinquent boys; to determine electrodermal (GSR) responses in the subjects and their relationship to measures of anxiety.
Subjects: 75 delinquent boys, 16 and 17 years, who were in custody of the Youth Center of the city of Cincinnati.
Methods: Subjects were brought into laboratory situation, told purpose of experiment, and instructed to talk for five minutes into a tape recorder about any subject. One third of the subjects were then administered a placebo, another third no medication, and one third 20 mg. of chlordiazepoxide. Electrodes were connected to each subject's forearm and wrist for electrodermal (GSR) measurements. Spontaneous GSR activity was measured initially; then other GSR measurements were taken. Boys were again instructed to talk for five minutes into a tape recorder about any subject, following which they were administered the IPAT Anxiety Scale. Further electrodermal studies were carried on under a number of conditions, after which subjects gave another five-minute verbal sample.
Findings: A significant decrease was found in anxiety and hostility levels as measured by verbal behavior method of Gottschalk and Gleser; specifically, anxiety and certain hostility scores of subjects showed a decrease in verbal sample given 45 minutes after ingestion of chlordiazepoxide. No significant correlations were found between IPAT anxiety scores and the electrodermal responses, although a low positive correlation was found between verbal behavior anxiety scores and spontaneous (GSR) activity in one group of subjects.
Duration: January 1963-October 1964.
Investigator(s): Louis A. Gottschalk, M.D., Research Professor of Psychiatry, and Goldine C. Gleser, Ph.D., Professor of Psychology, Department of Psychiatry, College of Medicine, University of Cincinnati, Cincinnati, Ohio; and Robert Fox, Ph.D., Assistant Professor of Psychology, Duke University, Durham, N. C.
Cooperating group(s): Foundations Fund for Research in Psychiatry; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published.

EDUCATIONAL PROCESS

General

18-N-1 CHILD DEVELOPMENT PROJECT

Purpose: To investigate factors associated with changes in school anxiety.
Subjects: Approximately 500 students in grade 4.
Methods: Students are to be followed for two years. A variety of test instruments are to be administered near beginning and end of each school year and between the two school years.
Duration: July 1964-August 1966.
Investigator(s): Beeman N. Phillips, Ed.D., Associate Professor of Educational Psychology, University of Texas, Austin, Tex.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted for journal publication.

18-N-2 VARIABLES RELATED TO OUTCOMES OF TEST INTERPRETATION

Purpose: To test the hypothesis that certain variables influence the outcomes of test interpretations (e.g., accuracy of self-estimates, satisfaction with self-estimates, motivation for test interpretation, father's occupational level, father and mother's educational level).
Subjects: Students in grades 5, 7, 9, and 11 from 5 small school districts.
Methods: Following orientation, students completed a self-rating scale, took a battery of tests, including a mental test and achievement test, and completed a third self-rating. Final follow-up self-ratings were completed by each student two months after his tests were interpreted. Counselor instruction emphasized involving students in test interpretation process, detection of underlying effect, and coping with this.
Findings: Teachers have reasonably accurate estimates of students' test performance. Most of the variables did influence outcomes of test interpretation, especially for students at top and bottom of scales.
Duration: October 1963-September 1964.
Investigator(s): Merle M. Ohlsen, Ph.D., Professor of Educational Psychology, University of Illinois, Urbana, Ill.
Cooperating group(s): Cooperative Research Division, Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Three papers to be published.

18-N-3 EFFECT OF TEST ITEM ARRANGEMENT ON THE PHYSIOLOGICAL AND PSYCHOLOGICAL BEHAVIOR OF PRIMARY SCHOOL CHILDREN

Purpose: To determine if the items of an individually administered standardized test may be arranged in such a manner as to reduce situational anxiety produced in a testing situation.
Subjects: Approximately 160 pupils, between the ages of 6 and 7 years, in the first grade of the Columbia, Missouri public schools.
Methods: Subjects are divided equally into four groups and individually tested four times. For each testing, items will be in a different arrangement (i.e., published order, random-order, absolute order of difficulty within subtests, and a patterned order in which the two easiest items are followed by the hardest

without regard to subtest). I.Q.'s, Galvanic Skin Response, and observations of behavior will be recorded for each testing session. The data yielded will be analyzed for differences and similarities.
Duration: September 1963-September 1964.
Investigator(s): Joseph L. French, Ed.D., Associate Professor of Education, University of Missouri, Columbia, Mo.
Cooperating group(s): Columbia Public Schools; Office of Education, U. S. Department of Health, Education, and Welfare.

18-N-4 A STUDY OF HIGH SCHOOL STUDENT ATTITUDES TOWARD AN UNGRADED SCHOOL PROGRAM CONDUCTED DURING AN ELEVEN-MONTH SCHOOL YEAR

Purpose: To ascertain some of the factors within the school setting, such as program, course work, teachers, peer group relations, etc., contributing to underachievement of high school students who fall at or above the 90th percentile on the SCAT; to assist students in making more efficient use of their academic ability.
Subjects: Matched groups of high school students at Nova High School, Broward County, Florida.
Methods: Matched groups will be subjected to a group psychotherapy-like procedure where initial emphasis will be upon collecting important factors.
Duration: June 1964-1967.
Investigator(s): Bady Quintar, Ph.D., Chief Psychologist, Thomas D. Prutsman, Ph.D., Donald B. Clark, Ph.D., and Alan H. Gregg, Ph.D., Clinical Psychologists, Henderson Clinic, 330 S. Riverland Rd., Ft. Lauderdale, Fla.
Cooperating group(s): Broward County Board of Education.

18-N-5 FAMILY LIFE PROGRAM FOR SCHOOLS

Purpose: To include in curriculum of schools of Cuyahoga County a family life study to orient children on importance of emotions in good health, expecially in children.
Duration: June 1964-not reported.
Investigator(s): William W. Herman, M.D., and Ralph I. Fried, M.D., 14077 Cedar Rd., Cleveland 18, Ohio.
Cooperating group(s): Academy of Medicine, Cuyahoga County.

18-N-6 BEHAVIORAL SCIENCES IN THE PRIMARY GRADES

Purpose: To determine whether psychology, sociology, and anthropology can be taught to primary school children as an added subject matter field in the curriculum.
Subjects: A fourth grade class in a local school.
Methods: Children were taught "behavioral sciences" on a 45 minute per week basis throughout the school year. Classroom situation, as well as their own experiences, were used as a laboratory. Teacher was a mental health consultant to the school. Achievement tests were administered to subjects and same test also given to undergraduate and graduate students of psychology; observers were present.
Findings: Fourth graders were able to learn behavioral science principles and facts, scoring on achievement tests between undergraduate and graduate students; graduate students scored highest. It was requested by children, parents, and administrators that program be continued.
Duration: September 1963-May 1964.
Investigator(s): Sheldon R. Roen, Ph.D., Director of Research, South Shore Mental Health Center, 1120 Hancock St., Quincy, Mass. 02169.
Publication: Article has been submitted for publication.

18-N-7 CREATIVITY AND HIGH SCHOOL CLIMATE

Purpose: To examine creativity and climate in a variety of high school settings; to determine environmental characteristics in schools judged to foster creativity as compared with other schools. Three hypotheses will be tested: (1) schools judged to be "High Creative" will be characterized by factors usually considered conducive to development of creativity; (2) staff of "High Creative" school will tend to be composed of individuals who are flexible, adaptive, and outgoing; and (3) highly creative students in these schools will indicate more positive attitudes towards their schools.

Subjects: Approximately 60 students and 30 staff members in each of four participating high schools. Two schools are designated "High Creative"; the remaining two, designated "Other" schools, are roughly comparable to "High Creative" in many ways.

Methods: Subjects administered High School Characteristics Index and a battery of tests of creativity. Staff will take Inventory of Beliefs. Selected highly creative students from each school will write essays about shape of their education. Methods of instruction will be observed, and school publications and records will be examined.

Duration: December 1963-June 1964.

Investigator(s): William J. Walker (Doctoral Candidate, Syracuse University), Box 662, Mexico, N. Y.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-N-8 THE CLASSROOM BEHAVIOR SETTING: ITS NATURE AND RELATION TO STUDENT BEHAVIOR

Purpose: To develop concepts and methods descriptive of structure and content of elementary classroom behavior setting; to demonstrate relation of environmental variation to student behavior variation.

Subjects: Elementary school children and their teachers.

Methods: Content analysis of field observations; use of already obtained specimen records and television tapes.

Duration: February 1963-October 1965.

Investigator(s): Paul V. Gump, Ph.D., Associate Professor of Clinical Psychology, Midwest Psychological Field Station, University of Kansas, Oskaloosa, Kans.

Cooperating group(s): Oskaloosa, Lawrence, and Topeka Public Schools; Education Research Project, Wayne State University; Social Psychology Laboratory, University of Missouri; Office of Education, U. S. Department of Health, Education, and Welfare.

18-N-9 TEACHER-CHILD INTERACTION: A STUDY OF THE RELATIONSHIP BETWEEN CHILD-INITIATED QUESTIONS AND NURSERY SCHOOL TEACHER BEHAVIORS

Purpose: To examine systematically the dynamics of relationships between acts of teaching and discernible effects on the learner's behavior in episodes created by the child posing a question to his teacher.

Subjects: 46 children, ages 4 to 5, and their nursery school teachers.

Methods: Timed observations of individual children on rotating schedule permitting distribution of episodes of teacher-child interaction in three segments of nursery school program. Each unit of interaction consists of child's question, teacher's act of teaching, and child's response to the act of teaching.

Duration: September 1963-September 1965.

Investigator(s): Dorothy Haupt (Ed.D. Candidate, Wayne State University), Merrill-Palmer Nursery School, and Frank J. Estvan, Ph.D., Professor of Education, Wayne State University, Detroit, Mich.

Publication: Dissertation to be available in Wayne State University Library.

18-N-10 DIAGNOSTIC STUDY OF EDUCATIONAL AND ATTITUDE CHANGES IN WHITE PLAINS PUBLIC SCHOOL STUDENTS

Purpose: To identify conditions under which a program of school desegregation can best be articulated with a program of continuous educational development.
Subjects: All White Plains public school students in grades 3 through 6.
Methods: I.Q., achievement, creativity, and attitude tests for first year.
Duration: June 1964-indefinite.
Investigator(s): Robert A. Dentler, Ph.D., Executive Officer, and Bernard Mackler, Ph.D., Research Associate, Institute of Urban Studies, Teachers College, Columbia University, New York 27, N. Y.
Cooperating group(s): White Plains Schools; New World Foundation.

18-N-11 DESEGREGATING THE PUBLIC SCHOOLS OF NEW YORK CITY

Purpose: To assist State Education Commissioner's Advisory Committee on Human Relations and Community Tensions; to create a factual base on which to evaluate nature and extent of public school segregation in New York City.
Methods: Sociological and demographic analysis of racial composition of all public schools in New York City.
Duration: March-May 1964.
Investigator(s): Robert A. Dentler, Ph.D., Executive Officer, and Richard A. Boardman, M.A., Research Assistant, Institute of Urban Studies, Teachers College, Columbia University, New York 27, N. Y.
Cooperating group(s): New York City Board of Education; New York State Education Department.
Publication: Data book on New York City Public Schools: *Ethnic Composition and Change* (limited edition); *Desegregating the Public Schools of New York City*.

18-N-12 FACTORS IN THE EDUCATIONAL PLANS AND CAREER ASPIRATIONS OF TWELFTH GRADE STUDENTS IN SELECTED LOW INCOME RURAL COUNTIES IN FLORIDA

Purpose: To determine the social, personal, and family background factors associated with educational and occupational plans and aspirations of twelfth grade students in three low income rural counties in north and northwest Florida.
Methods: In the winter of 1961, high school seniors and a parent of each were interviewed to obtain information on student and family characteristics, and on educational and vocational aspirations. Data were obtained on students' knowledge of available occupational alternatives and his conception of the requirements for these occupations. Data were supplemented by high school records of aptitudes and scholastic achievement. A follow-up study conducted in 1962 determined the actual occupational, educational, and residential status of the subjects.
Duration: 1961-June 1963.
Investigator(s): Margaret J. Hagood, Head, Division of Farm Population and Rural Life, Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C., and E. Grant Youmans, Ph.D., Department of Rural Sociology, University of Kentucky, Lexington, Ky.
Cooperating group(s): Florida Agricultural Experiment Station; Florida State Employment Service; Florida State Department of Education; University of Florida; U. S. Department of Agriculture.

18-N-13 ANALYSIS OF THE EXTENT AND CHARACTER OF PARTICIPATION OF FARM YOUTH IN HIGHER EDUCATION

Purpose: To appraise the comparative participation of farm youths in higher

education, the relative adequacy of their college preparation, their career aspirations, particularly with reference to technical and professional fields, and the socio-economic factors that influence the extent and effectiveness of their participation in higher education.
Methods: Analysis of Bureau of the Census Current Population Survey, May and October 1959, to reach some estimates of rural youth participation in higher education and gain insights into factors related to urban-rural differences in higher education participation. In addition, any or all of the following methods will be used: (1) analysis of some state university records to compare socio-economic characteristics, high school preparation and qualifications, academic standing, occupational experience, etc. for both rural and urban students; (2) interview freshman and senior class samples in state universities to learn about curricula, occupational plans and aspirations, academic preparation, family characteristics, home residence, etc.; (3) conduct local rural surveys of recent high school graduates to learn the proportions of high school students qualified and the proportion who actually attended college, and reasons for nonattendance.
Duration: 1959-April 1964.
Investigator(s): Louis J. Ducoff, Ph.D., Chief, Farm Population and Rural Life Branch, Economic Research Service, U. S. Department of Agriculture, Washington, D. C.
Cooperating group(s): National Science Foundation; Census Bureau, U. S. Department of Commerce; U. S. Department of Health, Education, and Welfare.

18-N-14 EDUCATIONAL AND VOCATIONAL GOALS OF RURAL AND URBAN YOUTHS

Purpose: To determine and compare educational and vocational goals of rural and urban youth with goals parents have for them; to determine interrelationships, similarities, and differences in goals according to sex, level of living, rural-urban background, and family size for each of the seven contributing States.
Subjects: 144 youths and their parents in each participating State. Selection of sample is based on criteria of urban residence in the same dwelling as parent, and enrollment in grade 9 or 10 of schools in cities of 40,000 or more population.
Methods: Schools in cities meeting population requirement will be selected at random. Three questionnaires, similar to those used in the rural study (Bulletin 15, Research Relating to Children), will be used in addition to a level of living scale suitable for urban populations. Boys and girls will be interviewed at school, while parents will be interviewed either in groups or in their homes.
Duration: June 1964-June 1967.
Investigator(s): Irwin V. Sperry, Ph.D., Head, Institute for Child and Family Development, Women's College, University of North Carolina, Greensboro, N. C.; Virle Payne, M.S., Department of Home Economics, Virginia Polytechnic Institute, Blacksburg, Va.; and Betty Jeffrey, M.S., Assistant Professor of Child Development and Family Relationships, College of Home Economics, University of Tennessee, Knoxville, Tenn.
Cooperating group(s): CSRS, Hatch.
Publication: State data to be published by the Experiment Stations of each contributing State. Data for the regional seven State area to be published in bulletin compiled by one of participating State Experiment Stations.

18-N-15 CHARACTERISTICS OF HIGH SCHOOL SENIORS AS RELATED TO SUBSEQUENT COLLEGE ATTENDANCE

Purpose: To examine nature and extent of talent loss in West Virginia; to study relationship of college attendance in region to scholastic aptitude,

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general and academic self-concept, achievement motivation, academic achievement motivation, college image, and socio-economic-cultural background factors of graduating high school seniors; to explore interrelationships among these variables.
Subjects: A sample of 1400 West Virginia high school seniors will be selected, with a 30 percent validation sample retained.
Methods: Pilot study will check adequacy of adapted instruments. In main study, sample will be tested with: (1) McClelland's measure of need achievement and a measure of academic achievement motivation; (2) Brookover's general and academic self-concept measures; (3) College Image Inventory; and (4) a socio-economic-cultural background inventory, SCAT scores will also be obtained. A follow-up will classify sample into three groups -- those who: (1) did not attend college the year following graduation; (2) attended college the year following graduation but withdrew by end of the first year; and (3) enrolled and remained in college through beginning of first semester of second year.
Duration: September 1963-June 1966.
Investigator(s): Dr. Benjamin H. Bailey, College of Education, and staff, West Virginia University, Morgantown, W. Va.
Cooperating group(s): Office of Education, U. S. Department of Health, Education and Welfare.

18-N-16 OPPORTUNITIES AND REQUIREMENTS FOR INITIAL EMPLOYMENT OF HIGH SCHOOL GRADUATES AND DROPOUTS WITH EMPHASIS ON OFFICE AND RETAIL JOBS

Purpose: (1) To obtain information about skills required for various entry jobs and availability of these jobs; (2) to determine relationship between high school education and present occupation of high school graduates and dropouts from office and retailing curricula; and (3) to develop a research methodology formulating indexes which reflect changes in entry-job requirements and opportunities.
Subjects: Employers in Detroit and youths, 16 to 22 who graduated from a Detroit high school in June 1963, or should have graduated but dropped out prior to graduation.
Methods: Structured personal interviews with approximately 500 employers and 200 graduates and dropouts at three intervals: July 1964, January 1965, and July 1965. Data from each round of interviews to be processed separately and together to establish trends in the employment of such young persons without prior work experience on a related job.
Duration: January 1964-December 1965.
Investigator(s): Fred S. Cook, Ph.D., Chairman, Business Education, and Frances R. Cousens, Ph.D., Research Associate, College of Education, Wayne State University, Detroit 2, Mich.
Cooperating group(s): Detroit Public Schools; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report to be published by Dr. Cook and by the Office of Education.

18-N-17 SCHOOL SOCIAL WORK IMPACT ON ACHIEVEMENT AND BEHAVIOR

Purpose: To demonstrate the impact of school social work services on academic achievement and incidences of undesirable classroom behavior in selected grades in two elementary schools; to analyze the kinds of problems children present in elementary grades and nature of problems responding best to full-time and limited school social work service.
Methods: Children will be identified as presenting academic achievement problems and undesirable classroom behavior through use of Pupil Adjustment Inventory, Metropolitan Achievement Tests, California Test of Mental Maturity, and other school records.

Duration: 1963-1967.
Investigator(s): Providence Velasco, M.A., Director, Pupil Personnel Department, and staff, Hillsborough County Public Schools, 1105 Bermuda Blvd., Tampa, Fla. 33605.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-N-18 MIDWEST REGIONAL CENTER FOR PUPIL PERSONNEL SERVICES

Purpose: To study professional role, function, and training of various pupil personnel workers in public schools.
Subjects: School administrators, teachers, special service workers, and perhaps, children.
Methods: Survey and interview studies of staffing patterns, training standards, etc., for pupil personnel workers, and an evaluation of their eventual impact on children.
Duration: August 1963-November 1967.
Investigator(s): Richard L. Cutler, Ph.D., Professor of Psychology, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Interprofessional Research Commission on Pupil Personnel Services; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Series of publications planned.

18-N-19 RESEARCH AND DEMONSTRATION IN PUPIL PERSONNEL SERVICES

Purpose: Primary prevention of learning disabilities and better utilization of pupil personnel services.
Subjects: Elementary and secondary students, their teachers, and pupil personnel workers in a number of school systems throughout the country.
Methods: The central staff conducts nationwide surveys relevant to functioning of pupil personnel workers in various types of schools. Regional centers at Universities of Maryland, Michigan, Texas, and California (Los Angeles) work directly with area school systems in an attempt to evaluate specific programs of pupil services. Outcomes are measured through observation and testing of teachers, parents, and children.
Duration: November 1962-October 1967.
Investigator(s): Walter B. Waetjen, Ed.D., Director, Bureau of Educational Research and Field Services, University of Maryland, College Park, Md. (Reported by Gordon P. Liddle, Ph.D., Associate Director, Interprofessional Research Commission on Pupil Personnel Services, University of Maryland.)
Cooperating group(s): Interprofessional Research Commission on Pupil Personnel Services; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-N-20 A STUDY OF CASES REOPENED FOR ADDITIONAL SERVICE IN THE DIVISION OF SPECIAL SERVICES FOR PUPILS

Purpose: To attempt to discover cause(s) for reopening of cases previously closed as satisfactorily adjusted.
Subjects: Pupils in Baltimore City Public Schools previously served by Division of Special Services for Pupils. A random sample of 100 reopened cases has been studied to determine relationships with various criteria. To extend study, a larger sample of another year's work will be drawn.
Methods: Correlations, tests of significance and other statistical devices to determine relationships and differences.

Findings: Of few trends revealed thus far, one example is significant differences between cases reopened because of attendance and those reopened because of acting-out behavior. This difference was most marked in area of intelligence, acting-out children being significantly brighter than truants.
Duration: November 1962-July 1965.
Investigator(s): Arthur Lichtenstein, Ph.D., Director, Division of Special Services, Marjorie Everinghim, M.S.W., Specialist in School Social Work, and Ralph Valeri, M.A., Clinical Psychologist, Baltimore City Public Schools, Calvert and 23rd Sts., Baltimore 18, Md.

Achievement, aptitude, and school adjustment

18-0-1 A STUDY OF THE RELATIONSHIPS OF INTELLIGENCE, ACHIEVEMENT, CREATIVITY, ANXIETY, AND CONFIDENCE AMONG INTERMEDIATE GRADE PUPILS IN A SUBURBAN AREA ELEMENTARY SCHOOL

Purpose: To add to the data relative to functioning of intellective factors as they might be affected by anxiety and/or more positive emotions.
Subjects: 216 pupils in grades 4, 5, and 6 in Radnor Township School System, Radnor, Pennsylvania.
Methods: Measurements were taken through use of the following instruments: (1) California Test of Mental Maturity; (2) California Achievement Tests; (3) Sarason's Test Anxiety Scale for Children; (4) Operational Confidence Scale; and (5) Minnesota Tests of Creative Thinking. Data were processed and studied through use of correlations, "matched group norms," means and standard deviations, criterion groups, and a limited number of case studies.
Findings: Correlations were positive between verbal creativity, intelligence, and achievement. Correlations between anxiety and achievement were high and negative for boys although more girls appeared to be anxious. Anxiety apparently did not inhibit performance on creative tests for many children.
Duration: September 1963-May 1964.
Investigator(s): Gertrude Gantz Bish (Ed.D. Candidate), Principal, Potomac Junior/Senior High School, Rockville, Md.
Publication: Available in George Washington University Library.

18-0-2 DESCRIPTIVE, NORMATIVE, AND PREDICTIVE STUDIES OF MINNEAPOLIS VOCATIONAL HIGH SCHOOL STUDENTS

Purpose: To help in counseling present and prospective students for vocational high school.
Subjects: Vocational high school students.
Methods: For comparison of dropouts and graduates in Part I of study, intelligence tests, occupational interest tests, and work in various courses, as well as such background material as occupation of father, junior high school attended, absence record in junior high, and personality ratings by teachers were used. High school achievement was measured by courses in English, technical, and related subjects.
Findings: The graduate is more likely to come from a normal family background and from schools away from downtown area, to have entered the tenth grade at an earlier age, to have a better attendance record, to be better liked by his classmates, to be more reliable, to have more initiative, and to be of slightly higher tested intelligence. From the first semester the graduate does better work in English, related courses, and shop courses. The graduate does not differ from the dropout in occupation of father, sex, and eighth grade achievement in reading and arithmetic tests.
Duration: 1958-1966.

Investigator(s): Ralph Johnson, Ph.D., Consultant in Counseling, and Isabel Berman, Ph.D., Psychologist, Minneapolis Board of Education, 807 N.E. Broadway, Minneapolis, Minn.
Publication: Information concerning publication plans may be obtained from principal investigator.

18-0-3 STUDY OF ACADEMIC PREDICTION AND GROWTH

Purpose: To help identify: (1) various growth patterns of students; (2) factors leading to accelerated or retarded growth; (3) whether academic achievement and aptitude become more variable as students mature; (4) effect of interaction of home background and aptitude; (5) differences which may exist in academic growth of boys versus that of girls; and (6) time at which academic aptitude or maladjustment can be detected.
Subjects: 40,000 students in grades 5, 7, 9, and 11 at time of initial testing, in 26 public and 6 private schools throughout the country.
Methods: Each student was tested in 1961 and retested every two years and in spring of his senior year. Sequential Tests of Educational Progress, School and College Ability Tests, Test of General Information, and Background and Experience Questionnaire were used in alternate year fall administrations, and CEEB American History and English Composition Achievement Tests as well as SAT or PSAT are administered in the senior year. The BEQ and TGI were developed especially for program. School visits are made when possible and a questionnaire is filled out by each principal on his school and community the school serves.
Findings: Preliminary data on twelfth grade prediction study are available; a progress report is in preparation.
Duration: September 1961-June 1968.
Investigator(s): Thomas L. Hilton, Ph.D., Research Psychologist, Developmental Research Division, Educational Testing Service, Princeton, N. J.
Cooperating group(s): College Entrance Examination Board.
Publication: Journal of Teacher Education 14:2, June 1963.

18-0-4 STUDY OF ACHIEVEMENT

Purpose: To study effectiveness of the Junior Kindergarten program in Toronto; to examine the learning process and progress in achievement; and to identify factors contributing to success and failure in school.
Subjects: 1,486 children entering Junior Kindergarten in 1960; 7,209 children entering Senior Kindergarten in 1961. To date, attrition has accounted for loss of approximately 25 percent of initial sample. Subjects leaving study are not replaced.
Methods: Longitudinal investigation covering at least first six years of school. Data collection techniques include: (1) Draw-a-Classroom Test; (2) rating questionnaire covering categories of language, mental, social, emotional, and physical "achievement"; (3) Metropolitan Achievement Test; (4) Otis I.Q.; and (5) test of creativity (modification of Circles Test).
Duration: Fall 1960-indefinite.
Investigator(s): A. R. MacKinnon, Ph.D., Director of Research, E. N. Wright, Ed.D., Research Associate, and D. C. Hambleton, Ed.D., Research Associate, Toronto Board of Education, Toronto, Ont.
Publication: Reports will be available from Research Department, Toronto Board of Education.

18-0-5 CHILDREN'S GOALS, ACHIEVEMENT, AND PERFORMANCE IN ELEMENTARY SCHOOLS

Purpose: To investigate the relationship between goal-setting behavior of school children and parents' attitudes regarding school aspiration and performance.
Subjects: Children, aged 9 to 12 years, to be selected on basis of school achievement, socio-economic class, and intellectual ability.
Methods: A factorial design is to be used in which subjects will be ordered on basis of variables. Scores on level of aspiration tasks, as well as methods of parental reinforcement, are to be related. With each parent and each child, individual interviews designed specifically for the project will be conducted, covering those areas relating to academic aspiration and performance; in addition, parent interviews will assess parents' attitudes toward their child concerning school behavior in general and toward their own academic successes and failures. Interviews will be recorded and rated by judges. All children will be individually administered a level of aspiration test and a reading and arithmetic test which will measure level of aspiration in these two areas.
Duration: 1964-1967.
Investigator(s): Erwin J. Lotsof, Ph.D., and William H. James, Ph.D., Associate Professors of Psychology, Northern Illinois University, DeKalb, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education and Welfare.

18-0-6 THE SUCCESSFUL URBAN SLUM CHILD: A PSYCHOLOGICAL STUDY OF PERSONALITY AND ACADEMIC SUCCESS IN DEPRIVED CHILDREN

Purpose: To discover the social and psychological factors that produce the good student; to compare relatively successful pupils from depressed urban neighborhoods with average and failing ones.
Subjects: Elementary school children, primarily in grades 2-3, their teachers, peers, and parents.
Methods: Observation, interview, and psychological tests.
Duration: June 1964-May 1965.
Investigator(s): Bernard Mackler, Ph.D., Assistant Professor, and Thelma Catalano, M.A., Research Assistant, Institute of Urban Studies, Teachers College, Columbia University, New York 27, N. Y. (Reported by Robert A. Dentler, Ph.D., Executive Officer, Institute of Urban Studies.)
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be published in psychological journals.

18-0-7 THE INFLUENCE OF PUPIL TURNOVER AND MOVEMENT ON SCHOOL PERFORMANCE

Purpose: To study school performance of inner-city school children who move a great deal; to study effect of turnover on academic performance, conduct, attitudes toward school, and on teacher morale.
Subjects: Lower class, urban elementary school children.
Methods: Records, interviews.
Findings: Mobility is very high--51 percent turnover in one school year. High mobility is associated with poorer grades; effect is strongest in girls in upper grades.
Duration: January 1963-continuing.
Investigator(s): Murray Levine, Ph.D., Associate Professor of Psychology, Yale University, New Haven, Conn.
Publication: Mimeographed report available.

18-0-8 EFFECT OF EXTRINSIC AND INTRINSIC MOTIVATION UPON THE GENERATION OF REACTIVE INHIBITION

Purpose: Previous studies have used an inverted number printing task to show that poor performers in reading, spelling, and handwriting generate reactive inhibition more rapidly than good performers. But the inverted number printing task appears to be inappropriate as a measure of reactive inhibition in the area of arithmetic, for it appears that good performers are intrinsically highly motivated to produce digits. The present study will attempt to determine whether extrinsic motivation will tend to have as much effect as intrinsic.
Subjects: 60 children in grades 4, 5, and 6 with average I.Q.s, chosen on basis of good or poor performance in spelling. Equal numbers of good and poor performers at each grade level were studied.
Methods: Good performers in spelling were given "extrinsic" motivation in an attempt to determine whether their performance would be similar to that of good performers in arithmetic, who were assumed to be intrinsically motivated. Whereas earlier Ss had simply been told that their cooperation would be appreciated, good performers were told that their performance would show how intelligent they were. Poor performers received the usual instructions. Performance of present Ss was then compared to that of good and poor performers in arithmetic and in spelling when the "unmotivating" instructions were used.
Findings: With extrinsic motivation, performance of good spellers was more like performance of good performers in arithmetic than the "unmotivated" good performers in spelling. It appears that extrinsic as well as intrinsic motivation will enhance digit production. It seems clear, too, that the notion that superior performance of good performers in arithmetic was due to intrinsic motivation was sound.
Duration: March-December 1964.
Investigator(s): Wayne Otto, Ph.D., Associate Professor, College of Education, University of Georgia, Athens, Ga.
Publication: Present plan is to report this as a Paper to be presented at annual American Educational Research Association meeting in Chicago, February 1965.

18-0-9 THE RELATIONSHIP OF LATERALITY AND SCHOOL ACHIEVEMENT

Purpose: To determine degree to which "mixed" and "strong" laterality relate to school achievement.
Subjects: Approximately 600 children in grades 4, 5, and 6 of "middle class" schools.
Methods: 12 tests of laterality administered: 4 handedness, 4 eyedness, 4 footedness; index of laterality calculated; coefficients of index and achievement scores obtained.
Duration: Fall 1963-summer 1964.
Investigator(s): Patrick J. Groff, Ed.D., Professor of Education, San Diego State College, San Diego, Calif.
Cooperating group(s): San Diego Foundation.
Publication: To be submitted to an education journal.

18-0-10 GENERAL RELATIONS BETWEEN CHANGES IN PERSONALITY AND INTERESTS, AND CHANGES IN SCHOOL PERFORMANCE AMONG NORMAL CHILDREN

Purpose: To measure personality and interest-motivation in children on two occasions a year apart; to establish norms of change and to correlate these changes with changes in school performance.
Methods: Questionnaire measures of best replicated factors in personalities of children, 11 to 15 years of age; objective (i.e., indirect) measures of interest-motivation factors; school records of grades and achievement tests. Correlational techniques of analysis employed.

Duration: September 1961-August 1964.
Investigator(s): Raymond B. Cattell, Ph.D., Research Professor, Laboratory of Personality Assessment and Group Behavior, Department of Psychology, University of Illinois, Urbana, Ill.
Cooperating group(s): Gilman, Kankakee, Danville, and Mattoon public school systems.
Publication: Laboratory report.

18-0-11 THE DEVELOPMENT OF THE BRAIN-DAMAGED CHILD PLACED IN REGULAR CLASS

Purpose: To scrutinize what happens to the brain-damaged child in a regular classroom setting.
Subjects: Brain-damaged children presently enrolled in the P.K. Yonge Laboratory School, studied longitudinally. Initial group will be those demonstrating hyperkinesis who have been identified by the classroom teachers through the use of a behavioral data sheet and through personal interviews with the teachers.
Methods: Subjects will be studied throughout their school careers and after by follow-up studies. Following subject identification, psychologists will administer tests to elicit or establish the presence of brain damage. In addition, each child will be clinically interviewed by two child psychiatrists to determine their psychiatric status; children will be followed by psychiatrists and psychologists at six-month intervals. At the same time, members of the College of Education research team will be studying selected students' teachers for general personality characteristics, approach to teaching, degree of directiveness or permissiveness, etc. in order to identify what classroom elements may be significant in the successful or unsuccessful education of the brain-damaged child.
Duration: January 1964-indefinite.
Investigator(s): Frank Carrera, III, M.D., Fellow in Child Psychiatry, Paul L. Adams, M.D., Assistant Professor of Child Psychiatry, Gerald S. Hasterok, Ph.D., Assistant Professor of Personnel Services, and J. B. Hodges, Ph.D., Director, P.K. Yonge School, University of Florida, Gainesville, Fla.

18-0-12 RESEARCH ON THE PREDICTION OF SCHOOL DROPOUTS

Purpose: To attempt to assess student attitudes towards school in the hope of developing materials useful in the prediction of school dropouts.
Subjects: Students in the freshman class of one private boys' high school.
Methods: Analysis of ego involvement; recognition of school colors; evaluation of own school in comparison with other schools; and role expectations in school milieu. Analysis was also made of membership formation of groups to which subjects belonged.
Findings: Evaluation of membership of upper group by its own members was higher than one would expect. Evaluation of members of lower group by themselves was lower. Group interaction was always present in upper and lower groups; middle group divided itself into two parts and interacted with upper group and lower group respectively. A high correlation was found between attitudes and stability of emotions.
Duration: May 1962-February 1963.
Investigator(s): Tsutomu Nozaka and staff, Juvenile Section of M. P. D., 2-Ichome, Kasumigaseki, Chiyodaku, Tokyo, Japan. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Winter 1963-1964.)

18-O-13 VALIDATION OF THE SCHOOL INTEREST INVENTORY ON SCHOOL DROPOUTS AND SEX DIFFERENCES IN THE UPPER SIX GRADES

Purpose: To secure national validation of dropout and linguistic-nonlinguistic scales developed in the Kansas City area.
Subjects: 20,000 junior high school pupils.
Methods: Administer inventory; contrast responses of school dropouts to matched students remaining in school to determine differentiating items; construct scale keyed to dropout responses. Same procedure will be used for linguistic-nonlinguistic scale to predict dropout potential.
Investigator(s): William C. Cottle, Ed.D., Professor of Education and Director, Counselor of Education and Counseling Psychology Program, School of Education, Boston College, Chestnut Hill 67, Mass.
Cooperating group(s): Houghton Mifflin Company.

18-O-14 DROPOUT STUDY ON TEN LOS ANGELES SCHOOLS

Purpose: To determine what happens to dropouts; to ascertain socio-economic factors of the population from which dropouts are drawn and mobility and attrition rates; to arrive at a precise definition of "dropouts."
Methods: Three year study based on interviews and mailed questionnaire.
Duration: January 1963-June 1965.
Investigator(s): Arthur J. Rowe, M.S., Head of Research and Statistics, Committee on Youth Employment Services, Federation of Coordinating Councils, Los Angeles County Department of Community Services, Los Angeles, Calif.
Publication: Report issued by Los Angeles Department of Community Services available upon request.

18-O-15 SCHOOL DROPOUTS

Purpose: To evaluate programs designed to reduce school dropouts in communities in Maine; to obtain information about promising practices in other States; to develop guidelines for local school departments or service clubs interested in planning community activities to reduce number of dropouts.
Methods: Questionnaire to superintendents of schools; visitation of systems where practices seem promising.
Duration: October 1963-February 1964.
Investigator(s): Philip A. Annas, Ed.M., Executive Director, Division of Instruction, and Henry G. Perkins, Ed.M., (Formerly) Superintendent of Schools, Maine State Department of Education, Augusta, Me.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Helping Youth Pursue Opportunities-Guidelines for the Prevention of School Dropouts, Augusta: State of Maine, Department of Education, 1964.

18-O-16 A STUDY OF THE RELATIONSHIP BETWEEN COUNSELING PARTICIPATION AND INCIDENCE OF DROPOUT AMONG A GROUP OF COLLEGE FRESHMEN

Purpose: To isolate personality factors typical of dropout-type students (personality factors will relate to early development); to determine whether relationship exists between extent of counseling participation and incidence of dropout.
Subjects: 2 matched groups, dropout and non-dropout, each comprised of approximately 30 college freshmen.
Methods: Students are given a routine battery of personality tests upon admission. They also receive individual counseling sessions to the extent

that they request and feel the need for them. Individuals in the two groups are evaluated and compared in terms of nature and intensity that various personality variables and counseling participation is manifested.
Duration: June-September 1964.
Investigator(s): Robert G. Milligan, Ph.D., Director, Testing and Counseling Center, University of San Francisco, San Francisco, Calif.
Cooperating group(s): University of San Francisco Faculty Research Committee.

18-0-17 THE WORLD OF WORK

Purpose: To carry out analyses of students who dropped out of Syracuse schools in 1959-60; to depict characteristics of dropouts who return to school; and to study relation of ecological to other factors.
Methods: Interviews with dropouts; analysis of family and employment status two years after leaving school; new analyses of census and other data on dropouts; examination of long-term employment changes and their possible effects on low-income families; and study of programs aimed at affecting the occupational outlook and prospects of youth.
Duration: September 1962-September 1963.
Investigator(s): Seymour M. Miller, Ph.D., Professor of Sociology, Youth Development Center, Syracuse University, Syracuse 10, N. Y.
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-0-18 FOLLOW-UP STUDIES OF DATA GATHERED AND PREPARATION OF MATERIALS FOR DISSEMINATION OF FINDINGS FROM THE HUMAN TALENT RESEARCH PROGRAM

Purpose: To further clarify extent and nature of "years of transformation" encountered by children moving through junior high schools and entering senior high schools in four communities (1957-1961); to develop materials and work out means of effective dissemination of findings to school and community agency personnel; to test aspects of a context model of human behavior which employs catalytic variables to explain changes over time; to explore part played by intervention as catalytic element necessary to induce changes as a consequence of various modes of dissemination.
Subjects: Children, grades 7 to 12, in 4 Texas communities; school personnel, prospective teachers, and graduate students working with investigator and staff in dissemination phase.
Methods: Pertinent data have been gathered in Human Talent Research Program; further analyses to be carried on by means of new applied multiple regression techniques corresponding closely to theoretical model. Several kinds of inservice education and internships, as well as new means of communication, will be studied as modes of dissemination.
Findings: Findings thus far available in widely disseminated project reports, chapters in books, journal articles, and duplicated materials.
Investigator(s): Carson McGuire, Ph.D., Professor of Educational Psychology and Director, Laboratory of Human Behavior, College of Education, University of Texas, Austin, Tex.
Cooperating group(s): Hogg Foundation for Mental Health; Department of Educational Psychology, and Extension and Field Service Bureau, University of Texas.
Publication: Reports on later phases of Cooperative Research Projects to appear as Cooperative Research Branch reports (Office of Education, U. S. Department of Health, Education, and Welfare) entitled "The Years of Transformation" and "The Assessment of Talented Behavior," 1964; duplicated materials and reprints to be available from Laboratory of Human Behavior in so far as funds permit; dissemination materials may be available from Hogg Foundation for Mental Health toward close of project.

18-O-19 IDENTIFICATION, DEVELOPMENT, AND UTILIZATION OF HUMAN TALENTS

Purpose: To take an inventory of human resources -- the aptitudes and abilities of high school students in all parts of the country; to establish a set of standards for educational and psychological measurement; to develop a comprehensive counseling guide indicating patterns of aptitude and ability which are predictive of success in various careers; to gain a better understanding of how young people choose their life work, and of the educational experiences which prepare students for their future.

Methods: Best known procedures for aptitude, achievement, information, and personality testing.

Duration: 1959-1983.

Investigator(s): John C. Flanagan, Ph.D., President, American Institute for Research, 413 Morewood Ave., and Professor of Education, University of Pittsburgh, Pittsburgh, Pa.

Cooperating group(s): Office of Naval Research, Department of the Navy; National Science Foundation; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Findings of Project TALENT are summarized in a series of reports: "A Design for a Study of American Youth;" "The American High School;" "The American High School Student."

Specific skills

18-P-1 RELATING GROUP ADMINISTERED BENDER-GESTALT TEST FUNCTIONING TO EARLY DEVELOPMENT IN LEARNING TO READ

Purpose: To develop early identification techniques to uncover potential reading problems of varying degrees and types.

Subjects: Elementary and preschool children.

Methods: Randomly selected primary and intermediate level elementary school youngsters in groups of 10 will be administered the Bender-Gestalt test using spiral-bound Bender plates. The S.R.A. Primary Mental Abilities Test will have been administered, as well as appropriate form of the Gates Reading Survey. A tangential project will examine preschoolers in groups of 10 during their regularly scheduled readiness testing in the spring, before they enter school, with the Bender-Gestalt. Psychometric correlations and deviation scores will be computed on a new, empirically developed Bender-Gestalt scoring system for all elementary grade levels. Material gathered from preschoolers will be looked at after completion of each grade through third to determine predictive value of Bender functioning in uncovering potential reading problems.

Duration: September 1963-June 1965.

Investigator(s): Sheldon L. Shubert, M.A., Psychologist, Board of Education of Baltimore County, Towson, Md. 21204. (Reported by Charles Leiman, Ph.D., Supervisor of Psychological Services, Board of Education of Baltimore County.)

Publication: Data will be released in departmental publication.

18-P-2 LONGITUDINAL STUDIES OF CHILDREN WHO LEARNED TO READ AT HOME, PRIOR TO ENTERING FIRST GRADE

Purpose: To assess the relative frequency of preschool readers; to identify factors within the child and his home environment that fostered early learning; to study advantages, or problems, of this earlier start in reading.

Subjects: In first study, 49 children in the Oakland, California Public Schools (Bulletin 10, Research Relating to Children); in second study, 156 children in the New York Public Schools and 30 children in a control group.

Methods: (1) Reading tests, Stanford-Binet Intelligence Test, Torrance's Test

of Creative Thinking, Word Memory Test, Bender-Gestalt, and Primary Mental Abilities Test; (2) parent interviews; and (3) teacher rating scales.
Findings: Children who read early encounter no problems with school instruction in reading; most profit from their early start, especially those with lower I.Q.'s. Early readers show wide variation in I.Q.'s and in socio-economic backgrounds. Most early readers are first interested in writing, afterwards in reading.
Duration: September 1958-June 1964.
Investigator(s): Dolores Durkin, Ph.D., Associate Professor of Education, Teachers College, Columbia University, New York 27, N. Y.
Cooperating group(s): Horace Mann-Lincoln Institute of School Experimentation.
Publication: Monograph covering both studies will be written in 1964.

18-P-3 INVESTIGATION INTO THE EFFECTS OF EXTENSIVE RECREATIONAL READING ACTIVITIES UPON THE READING INTERESTS, HABITS, AND SKILLS OF FIRST GRADE CHILDREN

Purpose: To determine effects of an extensive recreational reading program.
Subjects: First grade pupils in 5 classrooms in Lackawanna, New York.
Duration: January 1964-June 1965.
Investigator(s): William Eller, Ph.D., Director, Teacher Education, and Donald Pfau, Ed.D. Candidate, State University of New York at Buffalo, Buffalo, N. Y. 14214.
Cooperating group(s): Western New York School Study Council.

18-P-4 READING

Purpose: To study some of the factors causing reading difficulty.
Subjects: Elementary school children divided into groups of good and poor readers.
Methods: Subjects administered psychological tests; interviews with mothers.
Duration: September-December 1964.
Investigator(s): Dave Clarke, Ph.D., Supervisor of Individual Service, and Dave Ellingson, B.A., School Psychologist, and staff, Seattle Public Schools, 3045 42nd St., S.W., Seattle, Wash. 98116. (Reported by Mildred Laura Hittman, M.S.W., School Social Worker, Seattle Public Schools.)

18-P-5 MEDICAL ASPECTS OF READING DISORDERS

Purpose: To study various aspects of reading disorders, including development of visual perception, subclinical reading epilepsy, and related problems.
Subjects: School children with reading disorders.
Methods: EEG studies on children while reading; studies of various strata of civilization in the same ethnic groups.
Findings: Some children with reading disorders are found to have abnormalities in the brain which prevent reading.
Investigator(s): Leon Oettinger, Jr., M.D., Assistant Clinical Professor of Pediatrics, University of Southern California, Los Angeles, Calif.
Publication: *Journal of Pediatrics*.

18-P-6 A SURVEY OF VOLUNTARY WITHDRAWALS FROM AN INDIANAPOLIS SECONDARY SCHOOL WITH SPECIAL REGARD FOR READING LEVEL

Purpose: To determine: (1) if voluntary withdrawals have significantly low reading levels; and (2) if methods used in teaching reading had some effect

on level.
Subjects: Random representative sample of 1963-64 voluntary withdrawals from high school.
Methods: Survey-cross break of significant factors.
Findings: Reading ability was not a factor or cause of withdrawal as withdrawal group was not significantly low in reading. Chronic absence and high mobility were significant influences. About 10 percent of causes for withdrawal were directly related to academic work.
Duration: 1964.
Investigator(s): Joseph C. Payne, M.S., Supervisor of Educational Research, Indianapolis Public Schools, 150 N. Meridian St., Indianapolis, Ind.
Publication: Information may be obtained from investigator.

18-P-7 AN APPROACH TO THE CORRECTION OF READING DISABILITY THROUGH PARENT AND TEACHER GROUPS

Purpose: To determine whether a learning problem associated with reading disability could be identified early and accurately in the child's school career by utilizing existing procedures rather than adding new ones. To develop the most economical type of intervention aimed at reducing the incidence of reading disability, utilizing existing classroom structure with the addition of minimal consultation to school personnel and weekly group sessions with parents.
Subjects: 60 children from first and second grades in 1961-1962 school year and in first, second, and third grades in 1962-1963 school year. 18 girls and 42 boys were identified as predicted to have eventual reading problems, as they scored at or below the 50th percentile on a routine reading readiness test while in first grade. 30 were in the group whose parents attended discussion sessions; 30 in the noncontact group.
Methods: Group sessions with parents and study meetings with teachers were held to gain information about family processes and classroom procedures which might have bearing on children's reading disability. Tests to determine reading level were administered to contact and noncontact groups at conclusion of parent and teacher sessions.
Findings: Presented at annual meeting of American Orthopsychiatric Association, Chicago, March 1964.
Investigator(s): Harris B. Peck, M.D., Associate Professor of Psychiatry, and Meyer Rabban, Ph.D., Research Associate, Albert Einstein College of Medicine, Yeshiva University, New York, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-P-8 THE EFFECT OF TYPE SIZE ON READING AND SCHOOL ACHIEVEMENT IN PARTIALLY SEEING CHILDREN

Purpose: To investigate the role which size of printed type plays in the school achievement of partially seeing children.
Subjects: Approximately 1,000 partially seeing pupils and 600 visually normal pupils in grades 5 and 6.
Methods: Partially seeing pupils in 15 states have been tested with five alternate forms of the Metropolitan Achievement Test (reading and language subtests), each form in a different type size (12, 15, 18, 21, and 24 point type). Subjects will be given the complete Stanford Achievement Test in the type size in which they scored best on the Metropolitan.
Investigator(s): Jack W. Birch, Ph.D., Associate Dean, and William J. Tisdall, Ph.D., Assistant Professor, School of Education, University of Pittsburgh, Pittsburgh, Pa.
Cooperating group(s): Cooperative Research Branch, Office of Education, U. S.

Department of Health, Education, and Welfare.
Publication: To be submitted for journal publication.

18-P-9 ORAL AND WRITTEN LANGUAGE OF CHILDREN IN GRADES 4 AND 6 COMPARED WITH THE LANGUAGE OF THEIR TEXTBOOKS

Purpose: To discover by structural analysis the characteristics of children's language in a Southwestern geographical area; to compare children's written and oral language with each other, and with the language of their textbooks.
Subjects: Approximately 200 children who represent normal school population of grades 4 and 6; approximately 100 Negro children in grade 4.
Methods: Initially, data concerning intelligence, reading ability, personality, age, sibling status, verbal and nonverbal maturity, and achievement of subjects will be gathered, as well as information about the socio-economic status and education of parents. After a written and an oral sample of children's language are obtained through single type of stimulus (picture), syntactical units of both oral and written language will be analyzed by modern linguistic methods. Statistical studies will show correlation between children's language and variables such as age, maturity, etc. Samples of language of several textbooks used in two grades will be analyzed in same manner as children's language, and language structures of textbooks and children will be compared.
Duration: January 1964-July 1965.
Investigator(s): Mildred E. Riling, M.A., Associate Professor of English, Southeastern State College, Durant, Okla. 74701.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-P-10 A COMPARISON OF THE USE OF PHYSICAL EDUCATION ACTIVITIES AND THE LANGUAGE WORKBOOK AS LEARNING MEDIA IN THE DEVELOPMENT OF LANGUAGE ARTS CONCEPTS WITH THIRD GRADE CHILDREN

Purpose: To compare a predominantly "motor" activity learning medium with a predominantly "verbal" learning activity medium in the development of language arts concepts.
Subjects: 20 third grade children.
Methods: On basis of a pretest of eight language arts concepts, subjects were equated into two groups of 10. One group was taught by use of physical education activities and the other by use of a language workbook. Both groups were retested and comparisons were made. A comparison of pre- and post-test scores of LW group and PE group, and the post-test scores of both groups, was computed by using standard error of mean difference and the t ratio.
Findings: Obtained t for LW group was significant at .05 level and for the PE group at .01 level. Obtained t for the post-test of LW group and PE group was not significant. In PE group seven children showed a higher gain, in the LW group two children showed a higher gain, and one was the same.
Investigator(s): James H. Humphrey, Ed.D., Professor of Physical Education and Health Education, University of Maryland, College Park, Md.
Publication: Results of this and similar studies will appear in a textbook currently in preparation.

18-P-11 GEOGRAPHIC EXPERIENCES WITH SECOND GRADE CHILDREN

Purpose: To determine the growth and development of second graders during a school year in understanding map making, geographic terms, and relationships of location and space.

Subjects: Second grade children in a suburban school district outside Pittsburgh, Pa.
Methods: Drawings; field experiences; diary kept by teacher.
Findings: Children have difficulty with directions and with space relationship of local environment; they have less difficulty with removed environment. Second grade children can work with a large number of geographical concepts.
Duration: Fall 1963-fall 1964.
Investigator(s): John D. McAulay, Ed.D., Professor of Education, Pennsylvania State University, University Park, Pa.
Publication: To be published in fall or winter 1964-1965.

18-P-12 FACTORS AFFECTING COLLEGE STUDENTS' ACHIEVEMENT IN SCIENCE

Purpose: To determine to what extent factors such as reading ability, intelligence, interest, and science achievement, investigated during the Science Motivation Project (Bulletin 11, Research Relating to Children), may be related to later election of, and success in, science courses in college; to determine to what extent backgrounds of secondary-school science teachers of these students may be related to students' election of, and success in, college science courses.
Subjects: 3,000 students who participated in Science Motivation Project I, from public high schools in Illinois, Indiana, Ohio, and Michigan.
Methods: Scores made by students on science tests are evaluated for relationship with scores of students in science courses in college.
Duration: July 1963-December 1967.
Investigator(s): George G. Mallinson, Ph.D., Dean, School of Graduate Studies, Western Michigan University, Kalamazoo, Mich.
Cooperating group(s): Cooperative Research Branch, Office of Education, U. S. Department of Health, Education, and Welfare.

Special education

18-Q-1 AN EDUCATIONAL PROGRAM FOR SLOW LEARNERS IN GRADES SEVEN THROUGH TWELVE

Purpose: (1) To meet the needs of unsuccessful slow learners for vocational preparedness; (2) to retain the slow-learning, socially-alienated student in the school program through twelfth grade; and (3) to provide opportunity for and guidance toward adequate personal and emotional development for the failure-prone student.
Subjects: Approximately 225 students in grades 7 through 12 in Quincy, Ill. public schools. Subjects ranked in lowest 10 percent on a composite score for intelligence, socio-economic status, achievement, and educational stability.
Methods: Subjects are divided into groups of 20. Teacher is assigned to each group for a three-hour period; remains with group for three years beginning in seventh grade. Teachers assigned in ninth grade remain with groups through twelfth grade and accompany their groups to classes such as music and industrial arts. Daily learning experiences include attention to daily living needs and work-study experience. Work experience is provided in school setting and local industry.
Duration: June 1963-June 1968.
Investigator(s): Charles V. Matthews, M.S., Administrative Director; J. Robert Russo, Ed.D., Administrative Consultant; Edward Griffin, M.S., Director and Instructor in Education; James L. Odorizzi, M.S.; and George F. Gruendel, M.S., Research Assistants and Demonstration Teachers, Center for Study of Crime, Delinquency, and Corrections, Southern Illinois University, Edwardsville, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be published periodically as program progresses.

18-Q-2 SUMMER SCHOOL: HOME SCHOOL GUIDANCE AND STRENGTHENING PROJECT

Purpose: To raise the level of achievement and aspiration of pupils leaving junior high school for senior high. To study longitudinally high school failures and effect this type of program can have on them.
Subjects: 8A students in Summer School Strengthening Program at Fulton Junior High School.
Methods: Intensive counseling with pupils concerning their ability and achievement; informing parents of their children's abilities and achievements and level of accomplishment they should expect.
Duration: June 1964-June 1967.
Investigator(s): Paul C. Baumann, M.S., Principal, and Edward Wilkinson, M.E., Assistant to the Principal, Robert Fulton Junior High, Milwaukee Public Schools, Milwaukee, Wis.
Publication: Results will be made available to the Milwaukee School Board and can be requested from them.

18-Q-3 AN EXPERIMENTAL DEMONSTRATION AND EVALUATION PROGRAM: DELINQUENCY PREVENTION IN THE SEVENTH GRADE STRUCTURE OF COLUMBUS, OHIO'S JUNIOR HIGH SCHOOLS IN THE HIGH DELINQUENCY AREAS

Purpose: To demonstrate that prevention of delinquency, school dropout, and underachievement can be an integral and effective part of the classroom program; to demonstrate that regular teachers can be used to have a preventive impact on potentially delinquent boys at threshold age of official delinquency; to show that a junior high school classroom program can be geared to implant effective insulation against delinquency in potentially delinquent boys in high delinquency areas.
Subjects: Sixth grade teachers in slum, elementary schools nominated boys at end of the year who were likely to get into trouble soon and likely to drop out of school when older. Half of the nominated group was kept in the program; the progress of the other half, as well as "good boys", is also being followed. Clearance for performance, truancy, complaints to police, and appearances in juvenile court will be made. A new cohort goes through each year for three years; then clearances of the experimental group, control, and second controls ("good boys") for four years.
Methods: Models of behavior, geared to slum boys, are presented through reading material, tapes, movies, stimulus stories, and visitors. Within the seventh grade content of self-contained classes (three consecutive class periods each day), five units for presentation of models have been developed, each lasting from three to four weeks: "The World of Work," "What We Can Get From School," "Family Life," "What Government Does for Me," "How to Get Along with People." Planning meetings are held between research associates and teachers daily, and with the psychiatrist weekly.
Duration: July 1963-1969.
Investigator(s): Walter C. Reckless, Ph.D., and Simon Dinitz, Ph.D., Professors of Sociology, Ohio State University, Columbus, Ohio.
Cooperating group(s): Ohio State Research Foundation; Ohio State University Development Fund; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-Q-4 AN EVALUATION OF THE EFFECTIVENESS OF AN ENRICHED CURRICULUM IN OVERCOMING THE CONSEQUENCES OF ENVIRONMENTAL DEPRIVATION

Purpose: To evaluate the effectiveness of a long-term program of enrichment in improving the conceptual, language, and motivational attainment of lower socio-economic class children.
Subjects: Children from lower socio-economic backgrounds in New York City.

Methods: Experimental groups of children, beginning at preschool level and continuing through third grade, will be taught with a curriculum designed to provide stimulation in areas of cognitive, intellectual, verbal, and social development. Comparisons will be made with various control groups.
Findings: Pilot findings indicate significant gains in intellectual and language development for experimentally enriched children.
Duration: July 1964-December 1969.
Investigator(s): Martin Deutsch, Ph.D., Director, and Leo Goldstein, Ph.D., Senior Research Associate, Department of Psychiatry, Institute for Developmental Studies, New York Medical College, New York 29, N. Y. (Reported by Fay Boulware, Administrative Coordinator, Institute for Developmental Studies.)
Cooperating group(s): Ford Foundation.
Publication: Findings will be made available in major psychological and educational journals as well as through Institute for Developmental Studies publications.

18-Q-5 ENRICHMENT PROGRAM: AN AID FOR THE EDUCATIONALLY RETARDED

Purpose: To evaluate effectiveness of an enrichment program designed as a measure for coping with the problem of academic retardation.
Subjects: 10 classes involving 239 students, retarded by as much as 4.4 years (median 2.9), and having average class I.Q.'s of 72 to 85.
Methods: Intelligence and achievement of students was surveyed. Pre- and post-test method was used for evaluating growth.
Findings: Each of the 10 classes progressed at a rate beyond the average achievement expected. Eight classes made normal or above normal academic growth. Three classes gained as much as 12 to 13 months during the six-month period of enrichment evaluated. There was significant change in retardation status of the total group. Continuous rate of retardation in these groups was diminished; children with backgrounds and abilities like those involved in the study can and will, on the average, progress normally when educated in an enriched environment.
Duration: October 1962-April 1963.
Investigator(s): Octavia B. Knight, M.A., Director of Special Education, and Norman C. Johnson, Ed.D., Associate Professor of Education, North Carolina College, Durham, N. C.
Publication: North Carolina Teachers Record, March 1964.

18-Q-6 INTERVENTION IN THE COGNITIVE DEVELOPMENT OF THE CULTURALLY DEPRIVED AND FUNCTIONALLY RETARDED NEGRO PRESCHOOL CHILD

Purpose: To assess effectiveness of a preschool program as an intervention technique; to increase involvement of parents in education of their culturally deprived and functionally retarded child.
Subjects: From a total preschool population of a selected school district, a group of 3 and 4 year old Negro children from culturally deprived homes and diagnosed as mentally retarded are placed in matched control and experimental groups.
Methods: Experimental group attends a school-based, cognition-oriented program in the morning. Once a week, one of preschool teachers visits home of each experimental group child to conduct a home-based program in which parents participate in educational process. Groups of parents meet regularly to discuss mutual problems relating to children's education. Aside from initial testing and interviews, no further intervention occurs with children or parents of control group. Standardized tests are employed to discuss intellectual, academic, and school adjustment progress of both groups. Subjects will be followed through early elementary school years.

Duration: January 1964-December 1967.
Investigator(s): David P. Weikart, M.A., Director of Special Services and School Psychologist, Ypsilanti Public Schools, 300 W. Forest, Ypsilanti, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-Q-7 THE EDUCATIONAL EFFECT OF A PARENTS' COOPERATIVE "ENRICHMENT" NURSERY SCHOOL PROGRAM ON LOWER CLASS NEGRO CHILDREN

Purpose: To determine whether a parents' cooperative "enrichment" nursery school program can significantly improve verbal, reading, and general school performance of culturally disadvantaged Negro children.
Subjects: 40 lower-class Negro children, 3 years 10 months to 5 years of age.
Methods: Experimental and control groups initially matched for I.Q., age, and reading readiness will be retested after six months and during first, third and fifth grades.
Duration: December 1963-indefinite.
Investigator(s): Gerald D. Alpern, Ph.D., Senior Staff Psychologist and Assistant Professor, Medical School, Indiana University, Indianapolis, Ind.
Cooperating group(s): Board for Fundamental Education.
Publication: Report to be submitted to Board for Fundamental Education; other publication possible.

18-Q-8 A GROUP DAY CARE PROGRAM FOR CULTURALLY DEPRIVED CHILDREN AND PARENTS

Purpose: To determine the effects of a day care plus parent education program on the development of school readiness in underprivileged preschool children. In organizing day care project, special attention will be given to development of an intensive nursery program by which school readiness may be fostered and developed in the child. Aim of parent education program will be to encourage parents to support and reinforce those readiness skills child acquires in day care center. Evaluation will focus on possible cognitive, social, and emotional changes in children and extent to which there is modification in parental style of home and child management.
Subjects: Experimental group: 38 children, approximately 3 years of age when entering nursery school, and their parents; control group: 67 children, approximately 3 years of age, and their parents.
Methods: Tests administered yearly, including Stanford-Binet, Merrill-Palmer, Illinois Test of Psycholinguistic Abilities, and George Peabody Picture Vocabulary Test. Techniques used to study children's reactions to day care program include observations, teacher ratings, and standardized situations.
Duration: 1964-1966.
Investigator(s): Flemmie P. Kittrell, Ph.D., Professor and Head, Department of Home Economics, Howard University, Washington, D. C.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Q-9 SPECIFIC READING DISABILITY: TEACHING BY STIMULATION OF DEFICIT PERCEPTUAL AREAS

Purpose: To assess effectiveness of stimulation of areas of perceptual deficit. Specific questions to be answered are: (1) "Can perceptual deficiencies associated with specific disability be trained out through stimulation of areas of perceptual deficiency?" and (2) "Is improved perception reflected in improved reading achievement?"
Subjects: 40 boys, 7 to 11 years, I.Q.'s 85 and above, referred to Mental

Hygiene Clinic for specific reading disabilities.
Methods: Cross-over training design offering stimulation of deficit perceptual areas; "contact" sessions utilizing basal reader approach as alternate treatments. Each subject serves as his own control.
Duration: January 1964-December 1965.
Investigator(s): Archie A. Silver, M.D., Associate Clinical Professor of Psychiatry, Rosa A. Hagin, Ph.D., Instructor in Clinical Psychology, Department of Psychiatry, Medical Center, New York University, New York, N. Y.
Cooperating group(s): Carnegie Corporation of New York.

18-Q-10 A STUDY OF THE EFFECTIVENESS OF TRAINING RETARDED READERS IN AUDITORY PERCEPTUAL SKILLS UNDERLYING READING

Purpose: To explore the efficacy of additional auditory training for retarded readers in improving their reading skills; to develop an auditory training program.
Subjects: Third grade children from low socio-economic neighborhoods who are retarded in reading.
Methods: Reading and auditory training programs are given to a group of three or four children. Auditory program has been developed by staff; remedial reading program has eclectic approach.
Duration: June 1963-December 1965.
Investigator(s): Shirley Feldmann, Ph.D., Assistant Professor, and Cynthia P. Deutsch, Ph.D., Associate Professor, Institute for Developmental Studies, Department of Psychiatry, New York Medical College, New York 29, N. Y. (Reported by Fay Boulware, Administrative Coordinator, Institute for Developmental Studies.)
Publication: To be published at termination of project.

18-Q-11 "GOING TO COLLEGE": RE-MOTIVATING ELEMENTARY SCHOOL CHILDREN WHO HAVE SUFFERED READING FAILURE

Purpose: To determine whether a new surrounding might effectively motivate children to try again; to determine whether this will give them a new status with peers who have considered them "dull," "stupid," and/or "troublemakers."
Subjects: 21 children from Fitler Elementary School in Philadelphia. Children are culturally deprived, 6 to 12 years old, in grades 1 through 5. All but one have been "left back" at least one grade.
Methods: Remedial reading methods commonly practiced were used with two exceptions: (1) "Going to College" during a school day, two hours weekly; (2) closer relationship between pupil and instructor--one to one, two to one, three to one.
Findings: In initial findings after an experiment of 12 weeks, 7 improved reading level and gained higher approbation at school while 14 remained the same; 4 were retarded intellectually; 2 had psychological disturbances insurmountable at the time; and 8 remained on same reading level. All felt they had improved.
Duration: February 1964-May 1965.
Investigator(s): Adeline Wishengrad Gomberg, Ed.D., Assistant Professor of Education and Director, Reading Clinic, Beaver College, Glenside, Pa.
Cooperating group(s): Philadelphia Board of Education.
Publication: To be submitted to reading journals and/or psychology magazines or published in book form.

18-Q-12 THE USE OF PROGRAMMED INSTRUCTION FOR THE INVESTIGATION OF COMMUNICATIVE DISORDERS IN CHILDREN

Purpose: To determine the hierarchies of habits and skills involved in certain aspects of human communication; to describe communicative disorders in terms of exact manner in which these hierarchies are disrupted or maldeveloped.

Subjects: Children with speech, hearing, language, and reading disorders.

Methods: Instructional programs for individual children are developed to assess and teach basic skills such as color and shape matching, and systematically proceed to develop further programs which will assess and teach more complex skills such as color and shape naming. In this way, an objective and reliable description of acquisition of basic skills will be developed, and at the same time sets of instructional programs will be amassed.

Findings: Thus far, general strategy of assessing hierarchies of productive skills has proven quite fruitful.

Duration: October 1963-September 1968.

Investigator(s): Donald G. Doehring, Ph.D., Director, School of Human Communication Disorders and Associate Professor of Otolaryngology, McGill University, Montreal 2, Que.

Cooperating group(s): Quebec Department of Health; Canadian Department of National Health and Welfare.

Publication: To be published in psychology, speech and hearing, and child development journals, as appropriate.

18-Q-13 IMPROVEMENT OF LANGUAGE USAGE IN THE MENTALLY RETARDED

Purpose: To improve functioning ability of children who are unable to use language for purpose of communication.

Subjects: 30 mentally retarded children, C.A.'s 7.3 to 18.3, Stanford-Binet I.Q.'s from below norms to 53, all having some problems in communication.

Methods: Subjects divided into two general types of language difficulties on basis of neurophysiological theory of Dr. Lise Gellner and paired on basis of Gellner Classification and scores on Illinois Psycholinguistic Abilities Test. Children reside in social-living day care unit from 8:30 to 4:00 where all activities are established around language. Individualized language training is given by a psychologist and a professional worker. Eight psychological and achievement tests were administered at beginning of experiment; post-tests will be completed in October 1964.

Duration: February-October 1964.

Investigator(s): Betty H. Bradley, M.A., Psychologist, and Ruth A. Maurer, Nurse, Columbus State School, 1601 W. Broad St., Columbus, Ohio.

Publication: To be published in psychological or educational journal.

18-Q-14 A FEASIBILITY STUDY TO INVESTIGATE THE INSTRUMENTATION, ESTABLISHMENT, AND OPERATION OF A LEARNING LABORATORY FOR HARD-OF-HEARING CHILDREN

Purpose: To determine: (1) feasibility of establishing a self-instructional, self-operational learning laboratory for the observation of lipreading experiences by the acoustically handicapped; (2) feasibility of developing and practicing lipreading skills without physical presence of instructor; (3) instructional value of short, single-concept, eight millimeter sound films for repetitive instruction and practice; (4) behavioral reactions of hard-of-hearing child to utilization of such a learning laboratory system; (5) speculated use of a similar system in other subject areas, for other instructional problems related to education of hard-of-hearing student; (6) recommended areas of further study and research into use of instructional systems for hard-of-hearing; (7) functional design of learning laboratory facilities for individualized instruction.

Methods: Demonstration laboratories will be set up in Hard-of-Hearing Unit of Prescott Elementary School, Lincoln, Nebraska and Speech and Hearing Clinic, University of Nebraska.
Duration: June 1963-December 1964.
Investigator(s): Robert E. Stepp, Ph.D., Assistant Director, and staff, University Extension Division, University of Nebraska, Lincoln, Nebr. 68508.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-Q-15 PREPARATION AND EVALUATION OF AN ANALYTIC CURRICULUM IN ENGLISH FOR DEAF STUDENTS AT THE SECONDARY LEVEL

Purpose: To develop materials for teaching English, using concepts of modern mathematics.
Subjects: College preparatory students at Gallaudet College.
Methods: Using Stokoe's mathematical models of the English language (William C. Stokoe, Jr., The Calculus of Structure, to be published by Bobbs-Merrill) and Greenberg's analysis of errors made by deaf students (B. L. Greenberg and S. Withers, A Short Guide to Better Writing, in publication at Bobbs-Merrill), new analytical tools for the description of English and related curricular materials will be developed and tested against conventional methods.
Duration: August 1964-June 1968.
Investigator(s): William C. Stokoe, Jr., Ph.D., Professor of English, Harry Bornstein, Ph.D., Director, Office of Institutional Research, and Bernard L. Greenberg, M.A., Associate Professor of English, Gallaudet College, 7th and Florida Ave., N. E., Washington 2, D. C. (Reported by George Detmold, Dean, Gallaudet College.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-Q-16 PROGRAMMED LEARNING MATERIALS FOR THE BLIND

Purpose: To determine: (1) What formats of stimulus and response modes seem to be most suitable for using programmed materials with the blind; (2) what personal factors of the blind person may influence the use of programmed materials; and (3) what may be the optimal length of a program suitable for use with the blind.
Subjects: Blind and partially sighted children at Michigan State School for the Blind.
Methods: Four stimulus response modes for program research and science were used: Braille-auditory, Braille-Braille, auditory-auditory, and auditory-Braille. Students were then tested for speed and error on programs.
Findings: Blind students can handle 45 to 55 frames per average class without difficulty; stimulus response mode is Braille-Braille.
Duration: January-December 1963.
Investigator(s): George G. Mallinson, Ph.D., Dean, School of Graduate Studies, Western Michigan University, Kalamazoo, Mich.
Cooperating group(s): Hines Veterans Administration Hospital; Johanna Bureau of the Blind; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to The New Outlook for the Blind.

18-Q-17 PROGRAMMED EDUCATION FOR THE JUVENILE DIABETIC AND HIS PARENTS

Purpose: To evaluate teaching machine instruction.
Subjects: Juvenile diabetics and their parents.

Methods: Evaluation of care before and after exposure to programmed education using teaching machine technique. Basic laboratory data is being collected before and after evaluation.
Duration: June 1964-June 1965.
Investigator(s): Donnell D. Etzwiler, M.D., Pediatrician, St. Louis Park Medical Center, Minneapolis, Minn. 55416.
Cooperating group(s): Minnesota State Health Department; Bureau of State Services, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Data to be published.

18-Q-18 RELIGIOUS CONCEPTS OF THE MENTALLY RETARDED

Purpose: To ascertain at various levels what the retardate understands of religious concepts. Specifically, to compare effectiveness of lecture, catechetical, and visual presentation methods for religious instruction, including confirmation instruction; to determine the ideal repetition patterns for most effective learning; to determine value of programmed learning in religious instruction; to determine effectiveness of various kinds of visual presentations; to compare deductive and inductive methods of teaching religious truths.
Subjects: Trainable and educable retardates.
Investigator(s): Rev. Oliver Graebner, Ph.D., Professor of Psychology, Valparaiso University, Valparaiso, Ind. (Reported by Rev. C. F. Golisch, Executive Director, Bethesda Lutheran Home, Watertown, Wis.)
Cooperating group(s): Bethesda Lutheran Home.
Publication: Information available from Bethesda Lutheran Home.

18-Q-19 AUTOMATION IN VOCATIONAL TRAINING OF MENTALLY RETARDED AND/OR MENTALLY ILL ADOLESCENTS

Methods: Experimental teaching aids under development and in common practice utilized with the programmed instructional material.
Duration: October 1962-September 1965.
Investigator(s): Henry Platt, Ph.D., Director, Training Division, and Louis Kukoda, M.Ed., Coordinator, Vocational Services, Devereux Foundation Institute for Research and Training, Devon, Pa. 19333.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

18-Q-20 AN EDUCATIONAL EXPERIMENT WITH YOUNG MENTALLY HANDICAPPED CHILDREN BASED ON A NEUROPHYSIOLOGICAL CONCEPT OF MENTAL RETARDATION

Purpose: To investigate the habilitative value of diagnosing a mentally handicapped child's specific neurophysiological disability, or combination of disabilities, thereby providing the educator with a new and scientific basis for the approach to special teaching. To demonstrate that: (1) perceptual disabilities can be diagnosed; and (2) children identified as mentally deficient can learn if teaching methods are applied which use the intact cerebral systems of vision and/or audition.
Subjects: Children, aged 5 through 7 with I.Q.'s between 25 and 60.
Methods: (1) Identification of children by age, I.Q., and diagnostic examination of their perceptual disabilities; (2) grouping of children according to their predominant disability; (3) teaching by methods suited to diagnoses of disability; (4) using control groups; and (5) measuring the children's growth.

Duration: June 1963-September 1965.
Investigator(s): Thomas Hockman, M.A., Supervisor of Special Education, School District No. 11, Colorado Springs Public Schools, 1115 N. El Paso St., Colorado Springs, Colo., and Lise Gellner, M.D., 2 Kensington Hall Gardens, London W. 14, England. (Reported by Helen K. Bailey, Director, Department of Pupil Accounting and Testing Services, School District No. 11.)
Cooperating group(s): Colorado State Department of Education.
Publication: No specific plans yet; inquiries may be addressed to the project director.

18-Q-21 PUBLIC SCHOOL CLASSES FOR THE EMOTIONALLY HANDICAPPED: A RESEARCH ANALYSIS

Purpose: To study present operations and thus focus on pupil, teacher, and research needs.
Subjects: 74 classes totalling 530 children.
Methods: Questionnaires, site visits, observations, and pupil interviews.
Duration: January 1963-September 1964.
Investigator(s): William C. Morse, Ph.D., Professor of Educational Psychology, and Richard L. Cutler, Ph.D., Associate Professor of Psychology, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Council for Exceptional Children, National Education Association.
Publication: To be published by Council for Exceptional Children.

18-Q-22 THE CHILDREN'S CENTER: A SCHOOL FOR EMOTIONALLY DISTURBED CHILDREN

Purpose: Pilot project attempting to find an economical and efficient way to use specially selected teachers for the education and social re-education of emotionally disturbed children with a minimum amount of psychiatric consultation.
Subjects: Seven to nine year old children, ineducable by usual school standards due to emotional disturbance, who probably can be returned to public school within two years. Control groups are being utilized for preparative studies.
Methods: (1) Teacher-pupil ratio of 1 to 7; (2) daily teacher consultation with volunteer psychologists; (3) weekly group therapy session for teachers; and (4) weekly group therapy session for parents with volunteer psychiatrists.
Findings: Thus far, 50 percent of children have been returned to public school within a two-year period with a minimal financial cost and a maximum emotional cost to teachers. It is believed that secondary prevention is possible through this method.
Investigator(s): Irwin S. Jacobs, M.D., Medical Director, Ray Chaffins, M.Ed., Director, Children's Center, 155 N.E. 51st St., Miami, and Dean Beery, Ph.D., Dean, College of Education, University of Miami, Coral Gables, Fla.
Cooperating group(s): Dade County Board of Public Instruction.
Publication: Results to be published at end of 1964-65 school year.

18-Q-23 USE OF PROGRAMMED INSTRUCTION WITH DISTURBED STUDENTS

Purpose: To investigate the academic progress, therapeutic improvement, and change in social relationships with peers and authority figures achieved through use of programmed instruction as compared with conventional media.
Subjects: (1) Children enrolled in elementary and secondary school program at Vermont State Hospital; (2) students in below average sections of freshman class of one public and one parochial high school; and (3) small group of elementary age students in a private residential treatment center for emotionally disturbed children.

Methods: In each of the settings subjects are randomly assigned to a control and an experimental group. Control group receives usual type of instruction while experimental group receives programmed instruction for three academic subjects and joins control group for the fourth. Method of instruction for each group is alternated. In some instances change will occur each semester, in others at the end of the year, and in one instance method will be same for two years. Evaluations will be made at beginning and end of each semester by administration of group or individual intelligence tests, achievement tests, projective tests, sociometric data, and evaluations by those having regular contacts with students. Hospital students will also be evaluated by their psychiatrists.
Duration: June 1963-May 1966.
Investigator(s): Donald M. Eldred, M.A., Chief Psychologist, and George W. Brooks, M.D., Assistant Superintendent, Vermont State Hospital, Waterbury, Vt.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: No publication anticipated beyond progress report to be available in fall 1964.

18-Q-24 EVALUATION OF A SEX HYGIENE CLASS FOR ADOLESCENT PSYCHIATRIC INPATIENTS

Purpose: To evaluate effects of a sex hygiene class for adolescent psychiatric inpatients on their level of sex information, subjective adjustment regarding sex, general subjective adjustment, and deviant sexual behavior; to investigate the interrelations among these variables.
Subjects: 12 to 24 boys and 12 to 24 girls (depending on need for additional replication for statistical reliability of results), ages 12 to 17 and pubertal, who are inpatients in a state hospital youth center, not mentally defective, and without known brain syndrome. Subjects divided into experimental and control groups, equated for psychotic versus nonpsychotic diagnosis, prior sex behavior pattern, and age.
Methods: Experimental group attends sex hygiene class (boys and girls separately), weekly for three months, stressing films, group discussion, etc. related to sexual topics and related personal problems. Before-after testing of experimental and control groups includes sex information test, Rotter Incomplete Sentences Test with additional items related to sex adjustment, and peer ratings of each other on a tabooed sex behavior inventory. Statistical analysis of before-after changes comparing two groups on each measure; reliability coefficients of measures; intercorrelations among pretest measures.
Duration: July 1964-July 1965.
Investigator(s): William R. Morrow, Ph.D., Research Coordinator, and Fred Hammond, M.A., Chaplain, Fulton State Hospital, Fulton, Mo.
Publication: To be published in a professional journal.

EXCEPTIONAL CHILDREN

Gifted

18-R-1 THE GEORGIA GOVERNOR'S HONORS PROGRAM

Purpose: To conduct research designed to assist teachers, counselors, and other school personnel in understanding the nature and needs of Georgia students with exceptional intellectual abilities and unique potential; to aid in understanding the nature of the instructional program for exceptional students.
Subjects: 402 students in grades 11 and 12 from 92 Georgia high schools. 269 were chosen because of high intellectual ability; 133 were chosen because of outstanding ability in art, drama, or music.
Methods: Measures will be collected in five areas: I.Q., achievement level, social-emotional-motivational level, administrative data (size of secondary school unit, etc.), and physical status. For objectives related to nature of pupils, means, standard deviations, and ranges will be specified. For objectives pertinent to implications for school program, the following techniques will be employed: Pearson product-moment correlations and appropriate C.R. tests; Chi-square or critical C.R. tests of differences between frequencies; analyses of variance and, when indicated, appropriate paired comparisons.
Duration: June-August 1964.
Investigator(s): Kathryn Blake, Ph.D., Assistant Professor of Special Education, and Charlotte Williams, Ph.D. Candidate, University of Georgia, Athens, Ga.; William E. Bishop (Ph.D. Candidate, Kent State University), Research Project Manager, Georgia State Department of Education, Atlanta, Ga.
Publication: Incorporated in final report of Governor's Honors Program, released September 1964.

18-R-2 "PRESCRIPTION" FAMILY GROUP THERAPY: A STUDY OF FOCUSED, STRUCTURED GROUP THERAPY WITH HOMOGENEOUS FAMILY GROUPS

Purpose: To evaluate effectiveness of a new approach in group therapy; to investigate important psychodynamic patterns in the precipitous adolescent underachiever who is a former gifted achiever; to examine the precipitous adolescent underachiever from a broad epidemiological viewpoint.
Subjects: Adolescent, gifted boys in grade 10 who were in the upper 25 percent of their seventh grade class, and subsequently dropped to the lower 50 percent in eighth and ninth grades; appropriate control subjects.
Methods: A broad, overall look at the group will be obtained from data already available from Reading Ability and Outcome Study (Bulletin 16, Research Relating to Children). The most important psychodynamic patterns will be determined. One of the important patterns will be chosen and a focused, structured, short-term family group therapy approach will be utilized.
Duration: 1963-June 1965.
Investigator(s): Exall L. Kimbro, Jr., M.D., Harvey A. Taschman, M.S.W., and Beryce MacLennan, Ph.D., Consultant, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md.

Retarded

18-S-1 CALVERT COUNTY DEVELOPMENT

Purpose: To develop and pretest a census mail-out form, a child behavior checklist, and a vocabulary interview test for use in screening a community for mental retardation.

Subjects: Preschool children and persons 18 to 59 years; every 40th household in a rural Maryland county will be sampled.

Methods: Every fortieth household will receive a census form by mail. A trained interviewer will pick up the form and help respondent fill out difficult questions. If a preschool child is a member of the household, the child checklist will be administered to the caretaker.

Findings: Behavior checklist pretest on a sample of six suspected retarded indicated that these children who scored retarded on the checklist also had individual I.Q. scores below 70.

Duration: January-December 1964.

Investigator(s): Paul D. Imre, M.A., M.P.H., Research Associate, Department of Mental Hygiene, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md.

Cooperating group(s): Queen Anne's County Health Department; Queen Anne's County Board of Education; Queen Anne's County Welfare Board; Maryland State Health Department; Joseph P. Kennedy, Jr. Memorial Research Fund; Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: To be submitted for publication at completion of project.

18-S-2 THE USE OF CHILDREN'S DRAWINGS AS AN IN-SCHOOL SCREENING PROCESS FOR MENTALLY RETARDED CHILDREN

Purpose: To provide a simple method by which early identification of mentally retarded children may be made.

Subjects: 1732 pupils, grades 1 to 3, in 6 school areas.

Methods: Testing of pupils.

Findings: Ninety-six and nine-tenths percent of mentally retarded were included in teachers' selection of five "worst drawings".

Duration: Continuing to August 1964.

Investigator(s): James W. Hunt, M.Ed., Associate Professor of Education, Mississippi State College for Women, Columbus, Miss. (Reported by John E. Phay, Director of Institutional Research, University of Mississippi, University, Miss.)

Cooperating group(s): Mississippi State Department of Education.

Publication: Current project is follow-up to Study of Screening Procedures for Special Education Services to Mentally Retarded Children, Mississippi State Department of Education, 1960.

18-S-3 CYTOGENETIC AND GENETIC INVESTIGATIONS TO DETERMINE THE ROLE OF CHROMOSOME ANOMALIES IN CASES OF CONGENITAL MALFORMATIONS AND MENTAL RETARDATION WITH A FAMILY HISTORY OF HABITUAL ABORTIONS

Purpose: To determine frequency and mode of transmission of chromosome anomalies in cases of congenital malformations and mental retardation which have a family history of habitual abortions. Habitual aborting was chosen as an indicator of possible parental chromosome translocation.

Subjects: Children with severe congenital malformations and/or mental retar-

dation; parents and other family members of the propositi. Over 400 cases have been examined in past two years.
Methods: (1) Selected children are referred to laboratory by physicians. (2) Pedigree analysis is performed, with appropriate family members in attendance. (3) Karyotype analyses are performed on appropriate subjects, using peripheral blood, skin, or bone marrow as material to be studied in tissue culture. In cases of abortions, several tissues are examined karyotypically, using tissue culture. (4) Interpretation made of genetic findings to referring physician.
Findings: Thus far, approximately ten percent of subjects demonstrate evidence of transmission of chromosomal translocations from a phenotypically normal parent to a defective child. Percentage is high due to selection of cases. The "D/G" type of translocation, often resulting in Mongolism, was most common.
Duration: July 1964-July 1969.
Investigator(s): James D. Eisen, Ph.D., Assistant Professor of Human Genetics and Chief, Human Genetic Laboratories, College of Medicine, University of Nebraska, Omaha, Nebr.
Publication: Paper given at International Congress on Mental Retardation in Copenhagen, August 11, 1964. Publication will be in book form. Three other articles are being prepared.

18-S-4 A BEHAVIOR EVALUATION PROGRAM FOR RETARDED CHILDREN

Purpose: To apply fully controlled, free operant conditioning methods to problems of behavior diagnosis, training, and prognosis among severely retarded children. Initial phase now under way devoted to increasing scope of current methods to delineate reliably different specific patterns of behavior deficits and abilities in individual patients and location of specific prosthetic variables in the immediate "learning" environment which support each patient's most efficient performance.
Subjects: Institutionalized, retarded children selected by severity of presenting problems for caretaking and habilitative personnel as well as by presence of neurological or physiological dysfunction. Comparison subjects selected from other "nonproblem" groups and various behavior-competence subgroups (defined by institutional class, work, or ward placement).
Methods: Adaptations of free operant conditioning, utilizing full environmental control and multiple, simultaneous, continuous, automatic recordings, are being developed to locate and functionally analyze behavior deficits and ability throughout range of retardation. Intensive individual studies will yield multidimensional data analyzed to provide profiles of individual response interactions, resulting from a variety of environmental manipulations.
Findings: Methods applied thus far are extremely sensitive to a broad range of reliably different individual patterns which demonstrate specific forms of behavioral heterogeneity within presumably "homogenous" clinical subgroups. Specific deficits which are differentially amenable to modification by immediate environmental consequences have been located. The prosthetic (reversible) versus therapeutic (nonreversible) effects of such modification are being analyzed. Considerable methodological adaptation has become necessary to obtain clinically relevant automatic behavior measurements among more severely retetetarded children.
Duration: June 1963-August 1966.
Investigator(s): Beatrice H. Barrett, Ph.D., Director, Behavior Prosthesis Laboratory, and Director of Psychological Research, and Malcolm J. Farrell, M.D., Superintendent, Walter E. Fernald State School, Box C, Waverley, Mass. 02178.
Cooperating group(s): National Association for Retarded Children; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Two articles and one chapter in preparation.

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18-S-5 MINNESOTA PERCEPTO-DIAGNOSTIC TEST PERFORMANCE IN EDUCABLE MENTALLY RETARDED CHILDREN

Purpose: To establish normative data for a group of educable mentally retarded children on the MPD test; to compare this group with other diagnostic groups for which norms are already determined. Special attention will be given to organicity and different etiological factors in reading disabilities for purposes of differentiation.
Subjects: Samples of 450 normal and 260 behaviorally disturbed school children will be compared with approximately 250 educable retarded children, age range 8 to 21, at Owatonna State School.
Methods: MPD will be administered to these samples and scores will be statistically related and compared.
Findings: Thus far, retarded children rotate designs much more than normals, suggesting organicity and perceptual disorganization.
Duration: May-December 1964.
Investigator(s): A. Burnett, Ph.D., Chief Psychologist, Owatonna State School, Owatonna, and Gerald B. Fuller, Ph.D., Director of Clinical Research, Willmar State Hospital, Willmar, Minn.
Publication: To be submitted to *Journal of Clinical Psychology*.

18-S-6 DEMONSTRATION PROJECT IN PHENYLKETONURIA

Purpose: A five year project in case finding, follow-up, and control of phenylketonuria to be demonstrated in cases identified through screening of mentally retarded groups. Follow-up studies are designed to contribute to Virginia statewide effort in the prevention and treatment of mental retardation due to PKU.
Methods: Case finding will involve screening of mentally retarded populations, State and private mental health clinics, and State and private hospitals for the retarded and mentally ill; special classes in schools on a pilot basis. Follow-up will include screening of siblings in families in which a member has PKU to determine whether other cases exist; screening of relatives of such families as case finding discloses these, (i.e. nephews, nieces, cousins). Family counseling, dietary management, and carrier testing will also be involved.
Duration: June 1962-June 1967.
Investigator(s): Benedict Nagler, M.D., Director, Juanita Wood, A.C.S.W., Psychiatric Social Worker and Associate Director, and Michael Rostafinski, M.D., Associate Director, Lynchburg Training School and Hospital, Colony, Va. 24537.
Cooperating group(s): Virginia Department of Mental Hygiene and Hospitals; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-S-7 A COMPARISON OF LABORATORY TECHNIQUES FOR EARLY DETECTION OF PHENYLKETONURIA

Purpose: To compare the efficacy of the Guthrie inhibition assay test with the LaDu serum phenylalanine test.
Subjects: Approximately 3,000 newborn infants; half obtained at University Hospital, Iowa City, Iowa, and half at Providence Lying-In Hospital, Providence, Rhode Island.
Methods: Simultaneous blood determinations using the Guthrie technique and the LaDu micro technique; techniques are being applied on the first and fourth day of life.
Findings: Thus far, there has been no discrepancy between the LaDu and Guthrie techniques. The study now includes approximately 2,200 subjects. There has not been a false positive found.

Duration: December 1963-November 1964.
Investigator(s): Robert B. Kugel, M.D., Professor of Medical Science, Institute for Health Sciences, Brown University, Providence, R. I. 02906.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-S-8 PHENYLKETONURIA IN SCHOOL AGE RETARDED CHILDREN

Purpose: A demonstration project to identify undetected cases of phenylketonuria in a total school population of retarded children in California (approximately 50,000). It is estimated that 100 new cases of PKU will be detected and that 20 additional cases will be found in siblings of the index cases. By alerting affected families and their physicians, it is hoped that all subsequent newborn siblings in these families will be tested for this disease, and that mental retardation will thereby be prevented or at least minimized.
Methods: Public and private schools and training classes for retarded children sponsored by parent groups are being surveyed.
Duration: July 1962-1965.
Investigator(s): Richard Koch, M.D., Associate Professor of Pediatrics, School of Medicine, University of Southern California, Los Angeles 7, Calif., and Robert A. Henderson, Ed.D., Associate Professor of Special Education, Institute for Research on Exceptional Children, College of Education, University of Illinois, Urbana, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Materials and methodology developed will be made available to other states and thus serve as a demonstration model for similar school screening efforts.

18-S-9 FAMILY STUDY INTO CARRIER STATE OF PHENYLKETONURIA IN FAMILIES OF KNOWN PHENYLKETONURICS

Purpose: To ascertain unknown carriers of phenylketonuria; to determine other forms of mental retardation in families with member(s) affected by PKU.
Subjects: PKU's from Vineland State School and their families.
Methods: Social contacts with social work; urine loading tests with phenylalanine; blood testing for phenylalanine; tyrosine, tryptophane, and alpha amino nitrogen levels.
Duration: January 1964-January 1967.
Investigator(s): Miles E. Drake, M.D., Ph.D., Clinical Director, Vineland State School, Vineland, N. J.

18-S-10 DEVELOPMENTAL AND INTELLECTUAL ASPECTS IN CHILDREN WITH PKU AND IN CHILDREN WITH GALACTOSEMIA: PREDICTABILITY OF EARLY INFANT TESTING WITH SUBSEQUENT I.Q. ESTIMATES

Subjects: Patients followed longitudinally by a multidisciplinary team at the Child Development Clinic.
Methods: Routine psychometric evaluations by means of Gesell Developmental Scales (with infants and young children under age 4); Stanford-Binet Scale when sufficient language achievement permits test administration.
Duration: 1960-indefinite.
Investigator(s): Karol Fishler, Ph.D., Chief Clinical Psychologist, Child Development Clinic, Children's Hospital of Los Angeles, 4616 Sunset Blvd., Los Angeles 27, Calif.
Publication: To be reported in professional journals when data are completed.

18-S-11 RELATIONSHIP OF PHYSICAL STIGMATA TO INTELLECTUAL SUBNORMALITY IN MONGOLOIDS

Purpose: To obtain evidence on hypothesized relationship between extent of physical stigmata among Mongoloids and their degree of retardation.
Subjects: Institutionalized Mongoloids, 71 males and 57 females, average age 15 years, average I.Q. 24.
Methods: (1) Physical examination, including anthropological measurements; (2) intellectual examination using Stanford-Binet, LM or Cattell Infant Intelligence Scale.
Findings: Thus far, contra-indicative to hypothesized relationship.
Investigator(s): George Domino (Doctoral Candidate), Instructor in Psychology, University of San Francisco, San Francisco 17, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *American Journal of Mental Deficiency*.

18-S-12 REINFORCEMENT FUNCTIONS IN THE MENTALLY RETARDED

Purpose: To experimentally analyze reinforcement functions in mentally retarded children. Initial studies will be concerned with schedules of reinforcement, delay and goal gradients, the hierarchy of relative effectiveness, and the matrix of positive and negative presentation and withdrawal.
Subjects: Institutionalized mentally retarded children, M.A.'s 2 to 12 years, without chronic illness, severe physical disabilities, etc.
Methods: Experimental laboratory situations will be used, including free-operant and discrete trial learning tasks. Subjects are presented problems individually in repeated sessions, 30 to 60 minutes in duration. Individual patterns of behavior are analyzed.
Duration: June 1964-May 1967.
Investigator(s): Robert Orlando, Ph.D., Assistant Professor of Educational Psychology, University of Minnesota, Minneapolis, Minn. 55455.
Publication: Results will be published in appropriate journals (*Child Development*, *American Journal of Mental Deficiency*, *Psychological Record*, etc.)

18-S-13 BEHAVIORAL STUDY OF MENTALLY RETARDED CHILDREN

Purpose: To collect and analyze behavioral data; to study relationship between behavioral style and level of achievement in order to formulate testable hypotheses as to the predictive significance of a retarded child's behavioral style to his subsequent level of functioning and adaptation in various types of life situations.
Subjects: 50 retarded children of similar socioeconomic background, and mental and chronological age level.
Methods: Behavioral style and level of functioning for each child will be determined by rating a series of interviews with parents and teachers, direct observations of child, and by a summation of the separate ratings from each data source. Following data analysis, any correlations found between various aspects of behavioral style and level of function will permit formulation of a series of testable hypotheses.
Duration: October 1963-September 1966.
Investigator(s): Stella Chess, M.D., Director, Division of Child Psychiatry, and Harold Michal-Smith, Ph.D., Chief Psychologist, Department of Pediatrics, New York Medical College, 106th St. and Fifth Ave., New York 29, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in appropriate periodicals.

18-S-14 A STUDY OF THREE STEREOTYPED BEHAVIORS IN INSTITUTIONALIZED MENTAL DEFECTIVES

Purpose: To evaluate the effects of age, sex, and time variations in the three most prevalent forms of stereotyping in institutionalized mental defectives (i.e., body rocking, head rolling, and waving hand before the eye).
Subjects: 83 institutionalized mental defectives, including groups of young and old boys and girls.
Methods: Time sampling over a two-week period.
Findings: Significant variations in body rocking and head rolling as a function of time of day. Peak rates occur prior to meals and rest while valley rates occur following meals and rest. Waving hand before the eye stereotyping is the most stable over time and apparently least responsive to fluctuations related to environmental change.
Duration: January 1963-January 1964.
Investigator(s): Melvin E. Kaufman, Ph.D., Assistant Professor of Psychiatry, and Herbert Levitt, Ph.D., Instructor in Psychology, Medical School, University of Wisconsin, Madison, Wis.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted to American Journal of Mental Deficiency.

18-S-15 MOVEMENT PATTERN CHARACTERISTICS OF EDUCABLE AND TRAINABLE MENTALLY RETARDED CHILDREN

Purpose: To identify those elements in movement patterns which differ in mentally retarded and in normal children, if such differences do indeed exist; to ascertain what elements exist and differ between educable and trainable mentally retarded children.
Subjects: Pupils in a special school for exceptional children; pupils in special classrooms of local public schools; pupils in a special school-related program for underachieving school children; and children in a special program for mentally retarded children, serving on a national basis.
Methods: Subjective evaluation by qualified judges, application of movement pattern inventories and checklists from the literature, use of selected established motor performance "tests", and development and application of special checklists evolving from concurrent study.
Findings: Preliminary findings indicate that movement pattern differences do exist between mentally retarded and normal children and these differences fall into recognizable catagories. In addition, differences both in extent and degree exist between the educable and the trainable mentally retarded, with the amount and severity being directly proportional to extent and severity of retardation. Identification of exact deviations is in process of completion and "formal" classification.
Duration: September 1962-June 1965.
Investigator(s): Barbara B. Godfrey, Ph.D., Professor of Physical Education, University of Missouri, Columbia, Mo.
Cooperating group(s): Achievement Center for Children, Purdue University; Lafayette School System; Wabash School, Lafayette, Ind.; Woodhaven School, Columbia, Mo.; Indiana State Board of Health.
Publication: Probably Research Quarterly (American Association for Health, Physical Education and Recreation) or Journal of Exceptional Children.

18-S-16 EYE FIXATION RESPONSES OF SEVERELY RETARDED CHILDREN

Purpose: To analyze the eye fixation aspect of orienting response in severely defective children.
Subjects: Nonambulatory, severely defective children.
Methods: Rotating or stationary disc presented for varying lengths of time to

estimate whether child is fixating stimulus with his eyes during one minute trials.
Findings: One group looks at stimulus; another does not respond. Those that do fixate stimulus respond to it much as do infant chimpanzees. If a moving disc is stopped, fixations on it will continue more if it has been moving for thirty seconds than if it has been moving for eight minutes.
Duration: September 1963-indefinite.
Investigator(s): Gershon Berkson, Ph.D., Research Associate, Illinois State Pediatric Institute, 1640 W. Roosevelt Rd., Chicago, Ill.
Cooperating group(s): Illinois State Department of Mental Health.
Publication: Probably to be submitted to Journal of Comparative and Physiological Psychology or American Journal of Mental Deficiency.

18-S-17 PERCEPTUAL ROTATIONS AND OCULAR-MANUAL LATERALITY IN MENTALLY RETARDED ADOLESCENTS

Purpose: To determine the effect of standard and mixed (or nonestablished) laterality upon perception of rotated symbols; ultimately to relate these factors to reading achievement.
Subjects: 40 male and 20 female educable mental retardates from the full-time academic program at Johnstone Training and Research Center, all measuring below 4th grade reading level.
Methods: Five tests each of handedness and eyedness are used to establish each subject as right-sided, left-sided, mixed, or nonestablished (or any combination of handedness and eyedness among the aforementioned measurements). Four criterion tests measuring perception of numbers, letters, printed words, and manuscript words follow laterality tests which present symbols in various phases of rotation. A standard reading achievement test serves as an additional measurement.
Duration: April-September 1964.
Investigator(s): Rudolph J. Capobianco, Ed.D., Research Scientist, Johnstone Training and Research Center, Bordentown, N. J.
Cooperating group(s): New Jersey State Department of Institutions and Agencies.
Publication: Either a monograph or a series of articles to be presented through American Journal of Mental Deficiency and/or Journal of Educational Psychology.

18-S-18 COMPARISON OF FAMILIAL AND BRAIN INJURED MENTAL RETARDATES' ABILITY TO PERCEPTUALLY DISCRIMINATE ROTATED BENDER VISUAL MOTOR GESTALT DESIGNS

Purpose: To attempt to determine if inability to reproduce Bender designs is primarily related to perceptual difficulty or motor difficulty; to determine whether there is a significant difference in perceptual ability of familial or brain-injured mental retardates, as measured by this instrument.
Subjects: The institutionalized population of mental retardates at Rome State School in the I.Q. range of 50 to 80, male and female, age 12 and older.
Methods: 35mm slides projected on an automated device which allows the patient to match alternative choices by pressing the appropriate key. Every response is reinforced, whether correct or incorrect, to motivate key pressing behavior. Follow-up studies are planned which will make use of the reinforcement of key pressing behavior in a learning situation, when reinforcement will be forthcoming only for correct responses.
Duration: February-December 1964.
Investigator(s): Allen D. Ratzlaff, M.A., Chief Psychologist, Rome State School, Rome, N. Y. (Reported by Charles Greenberg, M.D., Director, Rome State School.)

18-S-19 PREDICTIVE VALIDITY OF FIVE TESTS WITH MENTALLY RETARDED CHILDREN

Purpose: To compare and evaluate the predictive validity of the Stanford-Binet, Pictorial Test of Intelligence, Peabody Picture Vocabulary Test, Progressive Matrices, and Illinois Test of Psycholinguistic Abilities, in terms of a broadly defined criterion of demonstrated learning ability.

Subjects: Approximately 100 educable mentally retarded children, approximately 7 to 11 years of age.

Methods: All predictor and criterion measures will be submitted to a correlational analysis, and magnitude of correlations of various predictors with criterion score compared.

Duration: May 1964-April 1965.

Investigator(s): Max W. Mueller, Ph.D. Candidate, George Peabody College for Teachers, Nashville 5, Tenn.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publication: Data will be available through Cooperative Research Branch, Office of Education.

18-S-20 A COMPARISON OF THE STANFORD-BINET L-M AND WISC WITH EDUCABLE RETARDATES

Purpose: To compare I.Q.'s of educable retardates as measured by 1960 revision of the Stanford-Binet Intelligence Scale and by Wechsler Intelligence Scale for Children.

Subjects: 50 white, educable, mentally retarded pupils (29 boys, 21 girls) in special classes, C.A.'s between 8.6 and 14.6 years with a mean C.A. of 12.2 years.

Methods: During annual routine re-evaluation of special class pupils, the WISC and Stanford-Binet L-M were administered to each in a counterbalanced order.

Findings: Stanford-Binet L-M I.Q.'s compare favorable with WISC V and FS I.Q.'s when used with educable mentally retarded 12 year olds.

Duration: November 1962-February 1963.

Investigator(s): John J. Pastovic, M.S., Psychologist, Clinton and Union County Boards of Education, Court House, Lock Haven, Pa.

Publication: Information is available by direct correspondence with investigator.

18-S-21 PATTERNS OF INTELLECTUAL FUNCTIONING AMONG CRMD STUDENTS

Purpose: To evaluate types of intellectual abilities among CRMD students; to test hypotheses concerning differences between "trainable" and "untrainable" mental defectives matched for Binet I. Q.

Subjects: 60 CRMD students, aged 8 to 12 years, in the New York City Public Schools, 30 classified as "educable" (Track 1), and 30 as less "educable" (Track 2) on the basis of their performance in classes.

Methods: A series of intellectual subtests (collectively called the "DIT") are being given to each subject. Results for each CRMD group will be compared for the subtests and for groups of subtests previously identified as reflecting different intellectual factors.

Duration: May-November 1964.

Investigator(s): Stephen A. Karp, Ph.D., Assistant Professor, and Norma L. Konstadt, B.A., Assistant Instructor, Department of Psychiatry, Downstate Medical Center, State University of New York, Brooklyn 3, N. Y.

Cooperating group(s): New York State Department of Mental Hygiene.

Publication: Ultimate publication is planned. Results, when obtained, will be made available upon request to S. Karp, Sinai Hospital of Baltimore, Maryland.

18-S-22 CORRELATIONAL STUDY OF I.Q. ESTIMATES OF MENTALLY RETARDED CHILDREN

Purpose: To ascertain the extent of agreement among estimates made by pediatrician, speech pathologist, psychologist, and parents of the developmental level of suspected retardates.
Subjects: Children between 1 and 12 who were referred to a mental retardation evaluation clinic.
Methods: All estimates were converted into standard scores. Correlation coefficients were run to measure degree and direction of estimates.
Findings: Data reveal very high agreement among professionals (correlations range from .749 to .863). Parental-professional agreement is also high (.634 to .776), although parents tend to overestimate the developmental level of their children. Highest agreement among judges tends to occur at the extremes of developmental level.
Duration: April 1963-February 1965.
Investigator(s): Richard A. Kurtz, Ph.D., Assistant Professor of Medical Sociology, Nebraska Psychiatric Institute, College of Medicine, University of Nebraska, Omaha, Nebr.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles to be submitted to professional journals.

18-S-23 THE HETEROGENEITY OF INTELLECTUAL FUNCTIONS IN THE MENTALLY DEFECTIVE AND ITS INFLUENCE IN THE PREDICTION OF ACADEMIC AND VOCATIONAL ADJUSTMENT

Purpose: To design and evaluate analytic or "factor pure" tests both for the assessment of intellectual functioning of mental defectives and for predicting their success on the job and in school.
Subjects: Two groups of mental defectives, 20 subjects per group, of significantly different I.Q.'s as measured by the better known global tests of intelligence.
Methods: Comparison of vocational and educational output of the two groups.
Findings: Differences in academic and vocational productivity of the two groups were not as great as expected from intelligence test data. Test scatter proved more useful in predicting educational and vocational achievement of mental defectives than the I.Q. score. Consequently, it appears that analytic rather than synthetic tests would be more useful both for assessment and for prediction of success in school and on the job.
Duration: July 1963-November 1964.
Investigator(s): Nicholas J. Kopatic, M.A., Clinical Psychologist, Vineland State School, Vineland, N. J.

18-S-24 AN EXPERIMENTAL INVESTIGATION OF THE EFFECT OF STIMULUS COMPLEXITY ON RESPONSE VARIABILITY OF MENTALLY RETARDED CHILDREN

Purpose: To establish in objective and quantified terms the effects which occur when retarded children are required to respond to essentially the same information organized at different levels of complexity.
Subjects: Approximately 400 children, ages 6 to 18, from a variety of sections of the United States, in public school classes for educable and trainable retarded and in regular first grade classes.
Methods: All subjects are given a one-item per page test (level of simplest complexity) and a second test, one week later, containing the same information as Test I, but varying from 1 to 18 in number of items per page. The Metropolitan Achievement Test, Primary I Form A, was basis for test.
Findings: Preliminary analysis suggests a complexity effect on at least some of the mentally retarded children.
Duration: February 1964-February 1965.

Investigator(s): Ruth Ann Davy O'Keefe (Doctoral Candidate, American University), Project Director, Institute of Educational Research, 2226 Wisconsin Ave., N. W., Washington, D. C. 20007.
Publication: Lithograph by Institute of Educational Research.

18-S-25 CODING BEHAVIORS IN THE MENTALLY RETARDED

Purpose: To investigate coding processes in the retarded, involving transformations of stimulus information from one modality to another; to study effect of verbal processes as a mediating step in coding behavior.
Subjects: An initial study utilized 54 mildly (educable) retarded adolescents.
Methods: Stimulus information was administered by various modalities (auditory, kinesthetic, verbal), and response was made either by tapping a key or by a verbal translation of signal. Task requirement was to imitate a four unit Morse code signal. Uni-modal versus cross-modal translations were compared.
Findings: Most efficient imitation occurred when a verbal signal was translated to a verbal response; least efficient condition for accurate imitation involved administration of a signal by tapping subjects finger and asking him to respond by tapping. Verbal-motor and motor-verbal translations were accomplished with intermediate degrees of accuracy with no significant differences between verbal to motor or motor to verbal arrangements. Results were related to findings by Luria of a "dissociation" between verbal and motor systems of behavior and to recent coding studies of Hermelin and O'Connor, 1963.
Duration: October 1963-indefinite.
Investigator(s): Marvin Rosen, Ph.D., Director of Psychology, and Marvin Kivitz, Ph.D., Director of Training, Elwyn School, Elwyn, Pa.
Publication: Initial and subsequent study to be submitted to American Journal of Mental Deficiency.

18-S-26 KENT-ROSANOFF NORMS FOR RETARDATES

Purpose: To determine Kent-Rosanoff norms for an institutionalized retarded population.
Subjects: About 1000 residents of Dixon State School, aged 10 and above.
Methods: Regular Kent-Rosanoff word association procedure done on an individual basis.
Duration: July 1964-June 1965.
Investigator(s): Rolland Metzger, Ph.D., Psychologist III, Dixon State School, Dixon, Ill.
Publication: To appear in American Journal of Mental Deficiency.

18-S-27 PAIRED-ASSOCIATE LEARNING IN RETARDED CHILDREN

Purpose: To investigate mediating responses utilized by retarded children and adolescents in paired-associate learning; to contribute thereby to a more precise understanding of the relationships between language and cognition in the development of normal and mentally retarded persons.
Subjects: Normal and educable retarded children at M.A. levels 6 to 12 attending regular and special education classes of schools in the greater Washington area; educable and trainable mentally retarded residents of District Training School with M.A. 6 to 10 for former and 3 to 6 for latter group.
Methods: Paired-associate lists varying pictures versus words as stimuli and responses; varying the associative strength of stimulus and response pair members; three stage mediation paradigms with combinations of verbal and pictorial elements.

Duration: January 1964-December 1966.
Investigator(s): Norman A. Milgram, Ph.D., Associate Professor of Psychology, Catholic University of America, Washington 17, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in suitable child experimental and retardation journals as findings emerge.

18-S-28 NEUROPHYSIOLOGICAL AND PERSONALITY BASIS OF LEARNING IN EARLY CHILDHOOD

Purpose: To study learning in committed retarded subjects, with a view to increased effectiveness of medical education; to adapt principles underlying a child's natural learning to speak to affective, rhythmic (musical), mathematical, writing, and reading skills. Mastery of the tools of such communication, possible by age five, will permit use of tools to begin in early grade school with consequent speeding up and increased efficiency of education and enhanced fulfillment of personality potential.
Subjects: Committed retarded plus 2 "retarded-deaf" patients in Carl and Caroline Swanson Clinic for Children, Nebraska Psychiatric Institute.
Methods: Direct work with children and adolescents; development of self-correction as natural feedback, by keeping from external criticism; supplying pattern of action, leaving child free to copy or vary from it; facilitation of cross-reference of sense modalities; hypothetical reconstruction of sequence of natural learning and trial of experiences in changed order; always in beginning learning, working from concrete toward abstract until child can make own abstractions and reason for himself.
Investigator(s): Leslie A. Osborn, M.D., Professor, Department of Neurology and Psychiatry, College of Medicine, University of Nebraska, Omaha, Nebr., and Gwen Arnold Osborn, Ph.D., formerly Associate Professor of Special Education, University of Wisconsin, Madison, Wis.
Publication: Paper delivered at Copenhagen Congress on Scientific Study of Retardation, August 1964.

18-S-29 "LEARNING POTENTIAL" AMONG THE EDUCABLE RETARDED

Purpose: To investigate the validity of a novel assessment approach to the retarded. Basic thesis is that when high grade retardate is given opportunity to learn how to perform on a nonverbal reasoning task, through medium of a systematic training experience (coaching), they would learn how to solve the specific reasoning task.
Subjects: Mildly and moderately retarded adolescents in institutions and in the community.
Methods: Kohs Block Design Test will be reasoning task. Subjects will be followed for a period of one or two years after discharge from special institutional care into supervised placements.
Duration: 1963-1966.
Investigator(s): Milton Budoff, Ph.D., Assistant Professor of Psychology, University of Massachusetts, Amherst, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-S-30 PERSONALITY AND SUCCESS PROFILES CHARACTERISTIC OF YOUNG MALE RETARDATES

Purpose: To obtain, through statistical analysis of the 17 obtained success factors, "success" groups which have been found to characterize major types of effective or ineffective performance among adult male retardates; to relate

personality and cognitive characteristics ("factors in persons") to particular "success" syndromes.
Subjects: 25 mentally retarded male youths were randomly drawn from each of the following situations: (1) graduates of Marbridge Foundation; (2) graduates of state school habilitation classes; (3) graduates of South Texas Habilitation Center's vocational training program; and (4) graduates of special education classes of public high schools in Texas communities.
Methods: (1) Cluster profiles of success; criterion measures now in form of "factors in persons"; and (2) prediction of profile group membership from personality characteristics (predictor factors).
Duration: May-August 1964.
Investigator(s): John R. Peck, Ph.D., Associate Professor of Educational Psychology, University of Texas, Austin, Tex. (Reported by Will Beth Stephens, Research Associate, Department of Educational Psychology, University of Texas.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to be submitted to Office of Education; an article to be submitted to professional journals.

18-S-31 SOME FACTORS INVOLVED IN ACCURACY OF PARENTAL ESTIMATE OF MENTAL AGE FOR CHILDREN SEEN AS MENTALLY RETARDED

Purpose: To evaluate some of the variables related to parents' assessment of their child's level of intellectual operation.
Subjects: Children and parents referred to Child Development Center.
Methods: Correlations will be made: (1) between measured and estimated mental ages; (2) for Vineland social age and mental age estimates and assessments; and (3) for both mothers and fathers according to family size, education, and sex of child.
Findings: Mothers in all classifications were significantly more accurate than fathers. "Best" estimators were mothers with more than eight years of education evaluating their daughters. Father's estimates were more closely related to "social age" than mental age; reverse was true of mothers.
Investigator(s): Ronald Ebinger, Ph.D., Clinical Psychologist, Child Development Center, 406 South Cascade, Fergus Falls, Minn.

18-S-32 GENETIC COUNSELING PROBLEMS IN CYTOGENETIC DISORDERS

Purpose: To investigate methods of family counseling in relation to types of cytogenetic diseases; to investigate cytogenetic disorders, expecially mosaicism, for their need of genetic counseling procedures.
Subjects: Children and families of children having:

- (1) Down's disorder (Mongolism, paramongolism)
  - a. Trisomy 21
  - b. Translocation 21
  - c. Mosaic 21
- (2) Klinefelter's Syndrome
  - a. nondisjunctional
  - b. mosaicism
- (3) Turner's Syndrome
  - a. nondisjunctional
  - b. mosaicism

Methods: (1) Classical investigations into psychodynamics of the family milieu with emphasis on the use of karyograms and other tangible data; (2) group therapeutics with emphasis on discussion and participation in the laboratory procedures (karyogramming); and (3) analysis of reproduction within kindreds prior to birth of the child, prior to counseling, and following counseling, for analysis of the simple projective testing of emotional prob-

lems before and after counseling.
Findings: Parents of Mongoloid children and the parents' siblings have been found to have marked decline in reproduction after birth and diagnosis of the affected child, which has resulted from the severe emotional disturbances stemming from suspected hereditary factors. Counseling aims at delineating these emotional stresses for their eventual alleviation. It is anticipated that effectiveness of counseling procedures can be measured on the basis of reproductive changes in the kindred.
Duration: August 1963-August 1968.
Investigator(s): Robert L. Tips, M.D., Ph.D., Division Head, Biochemical Genetics Division, Houston State Psychiatric Institute, Houston, Tex.
Cooperating group(s): Irvin A. Kraft, M.D., Director, Clinical Division of Child Psychiatry, Houston State Psychiatric Institute.
Publication: Eugenics Quarterly 9:237-240, 1962; Journal of the American Medical Association 184:183-186, 1963; American Journal of Mental Deficiency 68:334-339, 1963; American Journal of Diseases of Children 107:67-72, 1964.

18-S-33 DEMOGRAPHIC STUDY OF MENTALLY RETARDED PATIENTS ADMITTED TO BEATRICE STATE HOME

Purpose: To study trends in admissions to, and separations from, a home for the mentally retarded for a 50 year period.
Subjects: All admissions to, and separations from, Beatrice State Home during the period 1910-1960.
Methods: An examination of admissions in general and an analysis of differentials by age and sex. For an understanding of separation experience, all admissions are traced through time to determine whether they have been separated, and the type of separation.
Findings: The number of admissions has been increasing but the data reveal a severe year-to-year fluctuation pattern. In 38 of the 50 years, male admissions outnumbered females. The data reveal pronounced numerical and proportional increases in the younger age groupings.
Duration: October 1963-April 1965.
Investigator(s): Richard A. Kurtz, Ph.D., Assistant Professor of Medical Sociology, Nebraska Psychiatric Institute, College of Medicine, University of Nebraska, Omaha, Nebr.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles will be submitted to professional journals.

18-S-34 TRAINING RETARDED CHILDREN TO ENHANCE A FUNCTIONING GRASP SKILL

Purpose: To develop methods and materials for structuring the training of young retarded children to enhance a functioning grasp skill.
Subjects: Trainable retarded children, 3.6 to 8 years old, attending Orchard School; matched group of normal preschool children, attending National College of Education.
Methods: Direct observations, motion pictures, still picture of spontaneous actions and structured situations involving grasp. Interpretations of material and implications for teaching by a psychologist and team of preschool teachers, physical therapists and an orthopedic surgeon.
Duration: 1964-1966.
Investigator(s): Calvin K. Claus, Ph.D., Psychological Consultant, Orchard School and Instructor, National College of Education, Evanston, Ill.; and Julia S. Molloy, M.A., Director, Orchard School for Retarded Children, Skokie, Ill.
Cooperating group(s): Ben Levin Memorial for Retarded Children.

18-S-35 SOCIAL-PERCEPTUAL TRAINING OF RETARDED ADOLESCENTS

Purpose: To improve the social perceptions, inferences, and, most essentially, the behaviors of mentally retarded adolescents in social situations; to develop and test experimental procedures for training in social-perceptual skills.

Subjects: Four classes of mentally retarded junior high school pupils and four vocational training classes of residential (state institutionalized) retardates will be involved in the evaluation of a training program; two classes of both public school and of residential retardates will serve as disguised controls.

Methods: Experimental training procedures will be evaluated in terms of a pair of control studies permitting pre- and post-training measurement of social-perceptual acuity and interperson behaviors of all subject groups. Measures of social-perceptual acuity are to be derived from a standardized presentation of picture stimuli covering a wide range of social situations pertinent to retarded youth.

Duration: January 1964-December 1966.

Investigator(s): Barbara Edmonson, M.A., Research Associate, Children's Rehabilitation Unit, Medical Center, University of Kansas, Kansas City, Kans.

Cooperating group(s): Children's Rehabilitation Unit, University of Kansas Medical Center; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

Publication: To be submitted for journal publication.

18-S-36 A PROGRAM OF GRADUATED HABILITATION OF MENTALLY RETARDED YOUTH FROM INSTITUTIONAL TO COMMUNITY LIVING

Purpose: To closely observe a sample of male students going through process of moving from an institutional environment to an independent living situation; to gain better appreciation of this adjustment process experienced by retarded individuals; to permit more critical determination of students requiring supplementary assistance in process through resources on campus and those off campus.

Subjects: A limited sample of male retardates.

Methods: Half of subjects will be afforded a "stepping stone" between institution and community via the halfway house. A comparable group will remain in institution until placement is effected; then, each individual will move directly into community.

Duration: July 1963-1966.

Investigator(s): Joseph J. Parnicky, Ph.D., Superintendent, Neale L. Peterson, M.S., Vocational Supervisor, Harris Kahn, Ph.D., Principal Psychologist, Phyllis E. Plequette, M.S.S.S., Director of Social Service, and Herman H. Spitz, Ph.D., Research Associate, Edward R. Johnstone Training and Research Center, Bordentown, N. J.

Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

18-S-37 FOSTER HOME CARE FOR THE MENTALLY RETARDED

Purpose: To evaluate effectiveness and present use of foster homes for the mentally retarded.

Subjects: Retardates to be chosen from Connecticut.

Methods: Ex post facto design using matched pairs, one member institutionalized and one placed in foster home.

Duration: June 1964-June 1966.

Investigator(s): J. Raymond Pichey, M.S.W., Assistant Professor, School of Social Work, University of Connecticut, Hartford 5, Conn.

Cooperating group(s): Kennedy Center, Bridgeport; Office of Mental Retardation, Hartford, Conn.

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18-S-38 VOCATIONAL INTEREST AND SOPHISTICATION ASSESSMENT

Purpose: To permit further development of the validity and reliability of an experimental picture test of vocational interest and sophistication (VISA) which was evolved as a portion of a prior project supported by the Vocational Rehabilitation Administration (Bulletin 11, Research Relating to Children). Methods: Development of test was carried to point of determining its capacity to discriminate job preferences of retarded youth and its validity and reliability for a sample drawn from Johnstone Training Center. Investigations in present project will be pursued with additional retarded populations in a range of settings in order to establish applicability of VISA as a predictive device in vocational habilitation of both institutionalized and noninstitutionalized retardates.
Duration: July 1963-not reported.
Investigator(s): Joseph J. Parnicky, Ph.D., Superintendent, Arthur J. Burdette, M.S., Psychologist, Harris Kahn, Ph.D., Principal Psychologist, Herman H. Spitz, Ph.D., and Neale L. Peterson, M.S., Vocational Supervisor, Edward R. Johnstone Training and Research Center, Bordentown, N. J.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

18-S-39 VALIDATION OF THE VOCATIONAL CAPACITY SCALE UTILIZING INSTITUTIONALIZED RETARDATES

Subjects: All residents, 15 years and older, presently enrolled at Sunland Training Center at Marianna, a state residential institution for mentally retarded. Subjects consist of educable, trainable, and profoundly retarded residents.
Methods: The Vocational Capacity Scale (VCS) developed by MacDonald Training Center will be utilized. This instrument is made up of eight separate tests arranged to be administered in evaluation settings for purpose of predicting vocational potentialities of retarded young adults. Present and new residents, age 15 and above, will be evaluated with VCS. At end of one year in training-work program, all residents will be re-evaluated with VCS.
Duration: July 1964-June 1967.
Investigator(s): Maurice Dayan, Ed.D., Director of Psychological Services, Sunland Training Center, Marianna, Fla.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be published in a professional journal or in report form to Vocational Rehabilitation Administration.

Physically handicapped

18-T-1 PERSONALITY DEVELOPMENT IN CHRONIC HANDICAPPING DISEASES OF CHILDREN

Purpose: To investigate the influence of certain congenital, chronically handicapping conditions on development of young children and their families; to delineate some of the factors which determine nature of that influence.
Subjects: Study will include 120 children who will be drawn equally from four diagnostic categories: sickle cell anemia, cystic fibrosis, congenital heart disease, and congenital amputation. The four groups of 30 children each will be matched for age (with age range being from under 1 year through 8 years), sex, race, and socio-economic class, and will be drawn from patient populations at Children's Hospital of the District of Columbia and the Crippled Children's Unit of the District of Columbia General Hospital.
Methods: Parents of children, including father where possible, will be

evaluated by both a social worker and a psychiatrist, while the children will be independently evaluated by a second psychiatrist and a developmental psychologist. In each case the referring physician will provide an independent assessment of the severity of the child's physical condition.
Duration: October 1962-October 1967.
Investigator(s): Reginald S. Lourie, M.D., Director, Department of Psychiatry, Children's Hospital of the District of Columbia, and Samuel Schwarz, M.D., Director, Bureau of Maternal and Child Health, District of Columbia Department of Public Health, Washington, D. C. (Reported by Mary E. Robinson, Ph.D., Project Director, Research Foundation, Children's Hospital of the District of Columbia.)
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Individual research team members plan to publish papers in appropriate professional journals on particular aspects of procedure and research finding. At completion of study all team members will cooperate in the production of a monograph or book concerned with overall results of the study.

18-T-2 MORALE OF HANDICAPPED CHILDREN

Purpose: To develop a scale for measuring children's morale; to determine some correlates of differential morale among institutionalized handicapped children.
Subjects: 160 children in residence at Institute of Logopedics, Wichita, Kansas, ages 3 to 25 (median about 11 years), median I.Q. 58; representing wide variety of speech and neurological handicaps of all degrees of severity.
Methods: Nine-item Guttman scale involving behavioral traits of children presumed to be positive or negative indicators of morale. Subjects evaluated by housemothers in close day-to-day contact with child.
Findings: Scale met criteria for Guttman scalogram model, correlated positively with judgments of children's morale by preceptors and classroom teachers. For curvilinear relationship between morale and I.Q., morale was lowest among severely retarded and those with near normal I.Q., and highest among "middle range" subjects (40 to 60 I.Q.). No difference concerning sex, diagnosis of handicap, or length of time in institution. Analysis of other variables in process.
Duration: November 1963-January 1965.
Investigator(s): Harry R. Dick, Ph.D., Associate Professor of Sociology, University of Wichita and Institute of Logopedics, Wichita, Kans.
Publication: Paper on nature and development of scale submitted for publication; paper on correlates of morale in process.

18-T-3 GENETICS OF CHILDREN'S DISEASES

Purpose: To evaluate genetic and prenatal factors in children's diseases, particularly malformations.
Methods: Family histories; appropriate diagnostic tests.
Duration: 1950-1985.
Investigator(s): F. Clarke Fraser, M.D., Professor, Human Genetics Sector, Department of Genetics, and Director, Department of Medical Genetics, Montreal Children's Hospital, McGill University, Montreal 2, Que.
Cooperating group(s): Department of National Health and Welfare; Medical Research Council; National Research Council (Canada); National Foundation; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: American Journal of Human Genetics 16:1, 1964; Plastic and Reconstructive Surgery 33:395, 1964.

18-T-4 STUDY OF THE THALIDOMIDE CHILD

Purpose: To investigate the developmental potential of the thalidomide child from the affective and intellectual point of view.
Subjects: 33 children born between January 1961 and December 1962, most suffering from congenital anomalies of the extremities.
Methods: (1) Intellectual evaluation: the Griffiths Developmental Scale, Piaget's Scale of Object-Concept, and Haeussermann's Developmental Potential of Preschool Children; (2) affective evaluation: Gouin-Decarie's Scale of Object-Relationship.
Duration: January 1964-April 1966.
Investigator(s): Therese Gouin-Decarie, Ph.D., Associate Professor of Psychology, University of Montreal, Montreal, Que.
Cooperating group(s): Montreal Institute of Rehabilitation.
Publication: Results to be published, probably in Canadian Journal of Psychology.

18-T-5 THE FREQUENCY OF THE INCIDENCE OF CEPHALOFACIAL BIRTH DEFECTS

Purpose: To determine frequency of the incidence of birth defects among American Negro children.
Subjects: 80,000 birth records of American Negro children at two hospitals in the District of Columbia.
Methods: Mass survey; statistical analysis; comparison with similar studies.
Findings: (1) There are racial and socio-economic differences in frequency of total incidence in general and local (head and face) birth defects; (2) there are differences in types of defects; and (3) fewer American Negro children have cleft lip and/or cleft palate.
Duration: October 1962-July 1964.
Investigator(s): Leonard A. Altemus, D.D.S., Associate Professor of Orthodontics, College of Dentistry, Howard University, Washington, D. C.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Presented to and accepted as thesis by American Board of Orthodontics, May 1964. To be published in pediatric, cleft palate and orthodontic journals.

18-T-6 ANATOMICAL AND PHYSIOLOGICAL STUDIES OF PHARYNGEAL ACTIONS IN INFANTS AND CHILDREN HAVING CLEFT PALATE AND/OR OTHER ANOMALIES OF THE PHARYNGEAL REGION

Duration: 1961-indefinite.
Investigator(s): James F. Bosma, M.D., Chief, Oral and Pharyngeal Development Section, National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

18-T-7 DIAGNOSTIC AND PROGNOSTIC TECHNIQUES IN CLEFT PALATE

Purpose: To identify and validate criteria to be used in making management decisions in the habilitation of individuals with cleft palates.
Subjects: Newborns through individuals not more than 18 years, born with a cleft lip and/or palate and referred to the Department of Otolaryngology and Maxillofacial Surgery at the University of Iowa for care.
Methods: Extensive descriptions of all new patients by the surgeon, orthodontist, prosthodonist, speech pathologist, otologist, audiologist, clinical psychologist and medical social worker are made during patient's initial visit. These examinations are repeated at regular, prescribed intervals as the patient

proceeds through course of treatment. Premanagement evaluations are studied in light of postmanagement success to determine which observations, if any, had predictive value.
Duration: June 1963-indefinite.
Investigator(s): Duane C. Spriestersbach, Ph.D., Professor of Speech Pathology, State University of Iowa, Iowa City, Iowa.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results will be published as they become available in such journals as *The Cleft Palate Journal*, *Plastic and Reconstructive Surgery*, *Journal of Speech and Hearing Research*, *Angle Orthodontist*, etc.

18-T-8 CINERADIOGRAPHIC EVALUATION OF PROSTHETIC SPEECH AID

Purpose: To determine the size, shape, and location of prosthetic speech aid which would offer maximum voice quality improvement.
Subjects: 10 teenage white male and female subjects with nonoperated cleft of soft and hard palate and no cleft of lip or alveolus ridge. All subjects were tested or judged as having good speech, normal hearing, average or above mental ability.
Methods: Cineradiographic study of original speech bulb and a repeat study for each of three locations and dimensional changes. Effects of speech bulb location and dimensional changes were noted by sound spectrographic analysis and independent judgments by trained "listener" technique. Position of speech bulb varied above, below, and on the area of muscle constriction located on posterior wall of pharynx.
Findings: When speech bulb was located on area of greatest posterior wall activity, voice quality was considered to be socially acceptable -- the criterion used for normal speech. Size of speech bulb was reduced to one-fourth original size without apparent change in voice quality. When bulb was located below area of pharyngeal wall activity, voice quality was hypernasal. When speech bulb was located above appointed area, voice quality was rated as slightly nasal.
Duration: April 1963-April 1964.
Investigator(s): M. Mazaheri, D.D.S., M.Sc., Chief of Dental Services, and Robert T. Millard, M.A., Director of Speech and Hearing, Lancaster Cleft Palate Clinic, Lancaster, Pa.
Cooperating group(s): Pfeiffer Foundation; National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in *The Cleft Palate Journal*; paper read before American Cleft Palate Association, Los Angeles, April 1964.

18-T-9 A PRELIMINARY STUDY OF METHODS FOR EVALUATING THE SPEECH AND RELATED BEHAVIOR CHANGES WHICH ACCOMPANY THERAPY PROGRAMS FOR ORAL CLEFT PATIENTS

Purpose: To evaluate changes between pre- and post-therapy speech recordings of oral cleft patients in order to relate objective and subjective measures of speech in such a way that an index or indices of social adequacy of speech may emerge.
Subjects: Clinical cases drawn from cleft palate children seen at University of Michigan Speech Clinic and Speech Improvement Camp during summer session of 1964.
Methods: Recorded speech samples will be obtained by having patients with postoperative oral clefts read selected sentences and word lists at the outset of therapy and at weekly intervals thereafter until completion of therapy. Objective measures of pre- and post-therapy recordings will be made by use of sound spectrograph and listeners' identification of the words and sentences.

Subjective measures utilizing value judgments along predetermined scales will be correlated with objective measures. Palatopharyngeal, oral motor, sociometric and psychometric measures also will be compared; a follow-up study of speech will be compared with the results obtained from both pre- and post-therapy speech samples.
Duration: June 1964-May 1965.
Investigator(s): H. Harlan Bloomer, Ph.D., Professor and Director, and T. David Prins, Ph.D., Assistant Professor, Speech Clinic, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: *Journal of Speech and Hearing Disorders*; *Journal of Speech and Hearing Research*; and associated publications.

18-T-10 CORRECTION OF MAXILLARY ARCH ASYMMETRIES ASSOCIATED WITH CONGENITAL CLEFTS OF THE PALATE

Purpose: To reduce the problems associated with osseous deformities associated with congenital clefts of the palate.
Subjects: Children of all ages, with particular emphasis on older, neglected cases.
Methods: Intraoral devices planned to properly orient the maxillary alveolar arch to the mandibular arch are designed and utilized. Following correction, relationship between involved segments is maintained by bone grafting across clefts.
Findings: Preliminary efforts indicate promising possibilities.
Duration: May 1962-not reported.
Investigator(s): Herbert Conway, M.D., Professor and Attending Plastic Surgeon, and Dicran Goulian, Jr., M.D., D.D.S., Assistant Professor and Assistant Attending Surgeon, The New York Hospital, Cornell Medical Center, New York, 21, N. Y.
Cooperating group(s): Altman Foundation; New York City Society for Crippled Children and Adults.
Publication: *Annals of Surgery*, 158:431-439, 1963.

18-T-11 EFFECT OF ORAL ORTHOPEDICS PRECEDING REPAIR OF CLEFT LIP

Purpose: (1) To develop a method of extra-oral therapy in which widely deranged maxillary segments of a cleft lip-cleft palate deformity are reoriented presurgically into a near ideal arch form; (2) to study longitudinally the growth and development of the cleft palate and the so-called normal palate; and (3) to explore development of orthodontic methods and devices for treating malocclusions in deciduous, mixed, and adult dentition stages as they relate to cleft palate patient.
Subjects: Initially, study was concerned with infants having severe clefts of the lip and palate. Presently, all cleft lip and cleft palate patients coming to Babies' Unit Hospital are included.
Methods: Dental orthopedics conducted by extra-oral forces developed by investigator. Longitudinal growth and development studies of cleft palate child in general and the cranio-facial complex in particular are conducted by usual methods of anthropometry, cephalometric roentgenography, dental casts, photography, and intra-oral roentgenography. Records collected prior to and following surgical procedures. Orthodontic methods and devices, developed by investigator, are explored and compared to conventional orthodontic procedures.
Findings: Dental orthopedics by extra-oral means has been demonstrated. All subjects responded to therapy. Growth and development of maxillary segments has been demonstrated, further supporting need for extra-oral therapy as method of choice. New methods of diagnosis, principles of lip surgery, and orthodontic

appliances have been demonstrated.
Duration: June 1961-continuing.
Investigator(s): Michael B. Collito, D.D.S., M.S., Project Director, Babies' Unit Hospital, United Hospitals of Newark, 15 Roseville Ave., Newark, N. J. 07107.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-T-12 THE MEASUREMENT AND RETRAINING OF TONGUE-THRUSTING

Purpose: To develop an oral radiosonde device capable of detecting abnormal tongue pressures; to employ the emitted signal from an oral radiosonde to modify abnormal tongue habits.
Subjects: Children, 5 to 12 years, suffering from distortions of the oral arch attributable to tongue-thrusting.
Findings: Thus far, an experimental radiosonde has been produced and is ready for clinical trials.
Duration: September 1963-April 1966.
Investigator(s): Bruce Quarrington, Ph.D., Associate in Psychiatry and Associate Professor of Psychology, University of Toronto, Toronto, Ont.
Cooperating group(s): Laidlaw Foundation, Toronto.

18-T-13 ORAL DIADOKOKINESIS IN ABNORMAL SPEECH AND DEGLUTITION

Purpose: To identify diadokokinesia, or more specifically, dysdiadokokinesia, as a significant factor in the symptom complex found in certain disorders of speech and deglutition.
Subjects: Individuals at selected age levels from 3 to 21 years.
Methods: Utilization and experimentation with various methods of data collection will involve 16mm photography, electromyography, cine-radiography, and acoustic spectrographic analysis in order to establish a reliable, more easily obtainable procedure for data collection. Information will then be obtained pertaining to the patterning and quantification of oral diadokokinesis in normal individuals; this data will then lead to collection of information from individuals with known physical and functional disorders.
Duration: January 1964-December 1967.
Investigator(s): H. Harlan Bloomer, Ph.D., Professor and Director, Speech Clinic, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Speech and Hearing Disorders; Journal of Speech and Hearing Research; and associated publications.

18-T-14 ORAL AND WRITTEN WORD ASSOCIATION RESPONSES IN STUTTERING AND NONSTUTTERING CHILDREN

Purpose: To examine the differences between oral and written responses in terms of type, latency, and subjects.
Subjects: Stuttering and nonstuttering children.
Methods: Administration of revised Kent-Rosanoff words.
Duration: June 1964-January 1965.
Investigator(s): Henry Goehl, Ph.D., Assistant Professor of Speech, Temple University, Philadelphia 22, Pa. (Reported by Murray M. Halfond, Ph.D., Director, Speech and Hearing Center, Temple University.)
Publication: To be submitted to Journal of Speech and Hearing Research.

18-T-15 PSYCHOLINGUISTIC STUDIES OF PRESCHOOL CHILDREN

Purpose: To develop a battery of language and speech tests which can be used in future studies of children with delayed speech and language development, including populations of autistic, brain-damaged, cleft palate, and cerebral palsied children.

Subjects: Data are presently being collected on normal subjects, from birth to 6 years of age.

Findings: Patterns of development of over-inclusion and exclusion of word meaning and articulation skill can be determined for comparison with similar data on abnormal populations.

Duration: 1964-indefinite.

Investigator(s): Kenneth R. Bzoch, Ph.D., Head, Department of Communicative Disorders, Teaching Hospitals and Clinics, University of Florida, Gainesville, Fla.

Cooperating group(s): Medical and Psychology staff at J. Hillis Miller Health Center, University of Florida.

18-T-16 LANGUAGE BEHAVIOR OF NORMAL-SPEAKING AND ARTICULATION-PROBLEM CHILDREN

Purpose: To compare the ability of normal-speaking with articulation-problem children to recall and reverse words and word associations.

Subjects: Two groups, each consisting of 50 children from 5 to 8 years of age. One group consisted of normal-speaking children, the other of articulation-problem children.

Methods: For recognition and recall, five categories of word pairs including numbers and letters, words from like parts of speech, and variations in grammatical structure were used. The word association section employed 54 words, nine words from each of five parts of speech.

Findings: No differences indicated according to word-pair categories on reversal task, but articulation-problem children's scores were significantly lower than normals'. Word associations were better for normal children and were correlated with increased age.

Duration: March-August 1964.

Investigator(s): Robert W. Peters, Ph.D., Director, Speech and Hearing Center, University of Southern Mississippi, Hattiesburg, Miss.

Publication: To be submitted for journal publication.

18-T-17 DEVELOPMENT OF ENGLISH MORPHOLOGICAL RULES AND RECOGNITION OF SPEECH SEGMENTS BY FIVE- TO EIGHT-YEAR OLD NORMAL-SPEAKING AND ARTICULATION-PROBLEM CHILDREN

Purpose: To study ability of articulation-problem and normal-speaking children to use morphological rules and to recognize segments of speech framework of a spoken sentence.

Subjects: Two groups, each consisting of 50 children from 5 to 8 years old. One group consists of normal-speaking children, the other of articulation-problem children.

Methods: Sentences are used in which a missing nonsense word is supplied by the child to explore generalization of plurals, past, present, and future tense adjectives, adverbs, superlatives, and possessives. In test for recognition, subjects indicate whether they hear segments of four different lengths taken from sentences and mingled with segments not found in sentences.

Findings: Normal-speaking children scored higher on recognition of speech segments and slightly, but not significantly, better on morphological data than articulation-problem children.

Duration: March-August 1964.

Investigator(s): Robert W. Peters, Ph.D., Director, Speech and Hearing Center, University of Southern Mississippi, Hattiesburg, Miss.

Publication: To be submitted for journal publication.

18-T-18 NANAKULI SPECIAL PROJECT IN HEARING

Purpose: (1) To determine cause of high incidence of hearing loss in fifth grade children in Hawaii. A project carried out from 1957 to 1958 on 1,065 fifth grade children showed a medically significant hearing loss in nine percent of those tested. (2) To throw light on natural history of otitis media--why certain cases of acute otitis fail to resolve, and to explain etiological factors in the different types of chronic otitis media.
Subjects: 154 children below the age of 1 year at time of first examination in 1961, living in area served by Child Health Conference at Nanakuli, Oahu.
Methods: Nanakuli was chosen as it is a fairly typical semi-rural area, having a fairly stable population and a suspected high incidence of middle-ear disease. Beginning January 1961, the ears, noses, and throats of all children in the area were examined at monthly intervals during first year of life. Examination of this group was continued every three months in second and third year; examinations will be continued at six-month intervals to the tenth year. Children can be seen in the event of development of ear symptoms at any time. Annual audiometric studies are carried out at earliest possible age; otologic examination includes ear, nose, throat, and neck.
Findings: Thus far, high incidence of middle-ear disease and medically significant hearing loss in Hawaii's children is established beyond doubt.
Duration: January 1961-indefinite.
Investigator(s): John Watson, M.D., Consultant, Hawaii State Department of Health, Honolulu, Hawaii.

18-T-19 CLINICAL AND EPIDEMIOLOGICAL STUDIES OF HEARING LOSS IN CHILDREN

Purpose: To study early diagnosis and measures which will promote earlier recognition of children at risk, making earlier referral for training possible; to analyze the etiology of subjects' disorders, including a review of subsequent births in many of families first studied in order to investigate possibility of genetic etiology; to assess the incidence of associated abnormalities in the total group of cases and analyze various types which will be related to various etiological groups; and to study problems of unusual clinical interest.
Subjects: 300 preschool deaf children studied over a 10-year period.
Methods: Children received complete investigation, including pediatric, otological, audiological, psychological, genetic, and sociological study. Data will be analyzed with regard to certain epidemiological and clinical considerations.
Duration: April 1964-April 1965.
Investigator(s): G. C. Robinson, M.D., Associate Professor of Pediatrics, and K. G. Cambon, M.D., University of British Columbia, Vancouver, B. C.

18-T-20 VERBAL AND NONVERBAL LEARNING IN CHILDREN, INCLUDING THOSE WITH HEARING LOSSES, PART II

Purpose: To study auditory and visual presentations of rote-learning material in children, with particular emphasis on the hard-of-hearing.
Subjects: Large groups of children in the elementary grades are being used to establish a frame of reference; smaller groups of hearing handicapped children are then studied to search for similarities and differences in their behaviors.
Methods: Meaningful and nonmeaningful material is being used in a paired-associate task in various combinations of auditory, visual, and audio-visual presentations.
Findings: Little data have been tabulated on present project as yet. Previous research on this topic (Bulletin 14, Research Relating to Children) indicates that meaningfulness of the material is a more important variable than sensory channel of presentation.

Duration: September 1963-August 1966.
Investigator(s): John H. Gaeth, Ph.D., Director, Hearing Clinic, Wayne State University, Detroit 2, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Data will be reported initially in final report for project.

18-T-21 DIAGNOSTIC ASPECTS OF ELECTROENCEPHALIC AUDIOMETRY

Purpose: To analyze evoked responses to repeated auditory stimuli which will be recorded from scalp electrodes by means of an average response computer.
Subjects: Children from birth through 6 years of age with auditory disorders, and some normal-hearing children in same age range.
Methods: Responses will be evaluated in terms of: (1) stimulus parameters; (2) kind and depth of anesthesia; (3) maturational development; (4) nature of auditory disorders and subsequent development in verbal communication. Resultant analysis should yield information which will lead to early and accurate diagnosis of auditory disorders, and to better understanding of central auditory mechanisms. Studies of effects of anesthesia should lead to improved methods of controlling young children during electroencephalic audiometry without invalidating significance of evoked response pattern.
Duration: April 1964-March 1969.
Investigator(s): Robert Goldstein, Ph.D., Director, Division of Audiology and Speech Pathology, Department of Otolaryngology, Jewish Hospital of St. Louis, St. Louis, Mo.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in Journal of Speech and Hearing Research or Journal of Speech and Hearing Disorders.

18-T-22 VISIBLE SPEECH FOR THE DEAF

Purpose: To investigate selected determinants of the ability of deaf and severely deafened subjects to substitute vision for defective audition in the acquisition of speech. Project is designed to evaluate subject's ability to differentiate, recognize and produce: (1) patterns of sounds spoken in isolation or with the neutral vowel; (2) patterns of selected common variants of phonemes; (3) patterns of sounds possessing similar kinesthetic perceptual characteristics; and (4) patterns of syllables, words, phrases, and sentences in continuous speech.
Subjects: Students attending upper elementary and intermediate classes at Detroit Day School for Deaf.
Methods: Subjects work with experimenters for four 45-minute class periods per week with instruction during scheduled period. Students are taught sounds through visible patterns in acquisition and control of speech, necessitating utilization of a visio-kinesthetic control or feedback system in place of audio-kinesthetic mechanism used by normal, hearing individuals. The visible speech translator will be used.
Duration: May 1964-1967.
Investigator(s): George A. Kopp, Ph.D., Director, Speech and Hearing Clinic, Wayne State University, and Harriet G. Kopp, Ph.D., Principal, Detroit Day School for Deaf, Detroit, Mich.

18-T-23 VISUAL PERCEPTION IN STRABISMUS

Purpose: To develop an improved understanding of normal binocular vision and of certain disorders of binocular vision, particularly nonparalytic strabismus and amblyopia ex anopsia; to develop improved clinical techniques for the treatment of these disorders.

Subjects: In some experiments, normal binocular individuals are used as subjects; however, most are strabismic and amblyopic patients who have been referred for experimental treatment by practicing ophthalmologists in the Boston area. Most of these patients are children.

Methods: Evaluation of clinical procedures is carried out by treating patients and observing the results. This treatment consists primarily of visual exercises at home on a daily basis. Patients are seen in clinic at intervals of one to four weeks. Psycho-physical experiments, usually employing nonstrabismic observers, are carried out in the laboratory.

Findings: A new theory regarding the nature of the disorder in strabismus and amblyopia has been developed, and substantiating evidence has been obtained and published. New clinical techniques, derived from this theory, have been devised and their efficacy has been demonstrated.

Duration: September 1962-indefinite.

Investigator(s): Samuel C. McLaughlin, M.S., Research Associate, Institute for Psychological Research, Tufts University, Medford, Mass.

Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: American Orthoptic Journal, 9:77-88, 1959; American Journal of Ophthalmology, 48:1:148-153, January 1959; 49:5:132-135, May 1960; Psychological Monographs, in press.

18-T-24 PERINATAL FACTORS ASSOCIATED WITH STRABISMUS IN NEGRO CHILDREN

Purpose: To study perinatal factors associated with strabismus in children.

Subjects: Negro children born in a hospital within the State of Maryland on or after January 1, 1963.

Duration: April 1963-September 1964.

Investigator(s): Maureen Henderson, M.D., Associate Professor of Preventive Medicine, School of Medicine, University of Maryland, Baltimore, Md.

18-T-25 STUDIES OF HYSTERICAL AMBLYOPIA (BLINDNESS) IN CHILDREN

Purpose: To evaluate family interrelationships and dynamics to better understand how this blindness pattern resulted.

Subjects: Three or four children with this disorder and their families.

Methods: Clinical evaluations; treatment by conventional procedures; follow-up studies.

Duration: 1963-1966.

Investigator(s): Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-T-26 DIVERGENT THINKING IN BLIND CHILDREN

Purpose: To determine the quality and degree of divergent thinking abilities of totally blind pupils in day and residential schools when compared with visually normal children.

Subjects: 100 blind pupils in residential schools; 100 blind pupils in public day schools; 100 visually normal pupils in public day schools.

Methods: Assessment of the three groups on tests of divergent thinking.

Duration: June 1964-May 1966.

Investigator(s): William J. Tisdall, Ph.D., Assistant Professor, School of

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Education, University of Pittsburgh, Pittsburgh, Pa.
Cooperating group(s): Division of Handicapped Children and Youth, Office of Education, U. S. Department of Health, Education, and Welfare.

18-T-27 BEHAVIORAL CHANGES AS A RESULT OF VISUAL TRAINING

Purpose: To measure incidence and nature of behavioral changes resulting from visual training.
Subjects: 10 randomly selected clinical patients, 8 to 22 years, receiving optometric visual training at Gesell Institute.
Methods: 30 one-hour sessions of training once a week; behavioral tests (Posture, Rorschach, Wechsler, Bender-Gestalt) administered by a psychologist working independently, to be evaluated independently by two psychologists.
Duration: June 1964-December 1967.
Investigator(s): John W. Streff, O.D., Director of Visual Research, Gesell Institute of Child Development, New Haven 11, Conn.
Cooperating group(s): Gesell Irstitute of Child Development Visual Research Fund.

18-T-28 AUTONOMIC LABILITY, VISUAL GENERALIZATION, CONDITIONING, AND MOTOR PERFORMANCE IN ABNORMAL CHILDREN AND CHILDREN WITH MINIMAL BRAIN DYSFUNCTIONS

Purpose: To develop a battery of tests that will enable a reliable assessment of brain dysfunctions.
Subjects: Thus far, 60 normal children and 30 children with minimal brain dysfunctions, 6 to 12 years of age. Latter group are hyperactive, have difficulty in talking or reading, or exhibit motor incoordination and single perceptual defects.
Methods: Standard psychophysiological, conditioning, and psychophysical methods; Weschler Intelligence Scale for Children.
Findings: Autonomic lability is correlated with motor impulsivity, fast reaction times in motor tasks, and response discrimination in conditioning. Minimal-brain-syndrome (MBD) children exhibit, in general, more autonomic lability and associated signs than normal children.
Duration: June 1963-1967.
Investigator(s): Roscoe A. Dykman, Ph.D., and John E. Peters, M.D., Professors, Department of Psychiatry, and Jim Boydston, Medical Student, Medical Center, University of Arkansas, Little Rock, Ark.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Two or three papers to be written in next two years.

18-T-29 THE APPLICABILITY OF WISC RATIOS IN THE DETECTION OF CEREBRAL DYSFUNCTION IN CHILDREN

Purpose: To study the usefulness of Hewson-type ratios as applied to WISC profiles of brain-damaged and nonbrain-damaged children.
Subjects: 20 groups of children covering various categories (private, public, clinic, hospital, sex, ethnic groups, etc.), half of whom have various types and degrees of cerebral dysfunctions; other half are matched controls.
Methods: WISC profiles were scored for six ratios derived from Hewson's work on the WAIS. Means, standard deviations, and correlation coefficients were derived together with age, full I.Q., verbal I.Q., and performance I.Q.
Findings: Encouraging for at least three of the six ratios, but sex differences seem to obliterate somewhat the usefulness of these ratios in the detection of cerebral dysfunctions.

Duration: January-December 1964.
Investigator(s): Luciano L'Abate, Ph.D., Assistant Professor and Chief Psychologist, Children's Unit, School of Medicine, Emory University, Atlanta, Ga.
Cooperating group(s): Aileen Clawson, Ph.D., Clinical Psychologist, Wichita Child Guidance Center, Wichita, Kans.

18-T-30 RELATIONSHIPS BETWEEN WECHSLER INTELLIGENCE SCALE FOR CHILDREN SCORE PATTERNS AND BRAIN DAMAGE IN CHILDREN

Purpose: To investigate possible relationships between score patterns and focus of damage.
Subjects: Approximately 60 children referred to pediatric neurology clinic because of possible central nervous system dysfunction.
Methods: Wechsler Intelligence Scale for Children; neurological evaluation.
Duration: March-November 1964.
Investigator(s): Gerald Gruden, Ph.D., Assistant Professor of Psychology, Pediatric Neurology Clinic, Department of Neurology, Medical Center, Indiana University, Indianapolis, Ind.

18-T-31 DEVELOPMENT OF NEUROMUSCULAR COORDINATION BY CHILDREN WITH BRAIN DAMAGE

Purpose: To study the relationships between impairment of motor skills and intellectual functions in children with neurological evidence of cerebral dysfunction.
Subjects: 44 children under age 7 and 12 children over age 7 having organic cerebral dysfunction of known and unknown etiology, including children referred mainly for speech problems, as well as a few with behavior and motor disorders.
Methods: Physical and neurological-psychological examinations were carried out to elicit information concerning visual-motor activity and, qualitatively, the relative ability to receive and communicate information by means of the sensory modalities of audio-verbal, visual-motor, and, to some extent, tactile-kinesthetic-motor modalities. The Wechsler Intelligence Scale for Children and other similar tests were used in psychological examinations. Motor development testing was carried out by use of Lincoln-Oseretsky Motor Development Test in children over age seven or the Gesell in children under age seven. Encephalography has been used in most cases; speech examination and, when indicated, a hearing examination has been performed.
Findings: Number of subjects examined is insufficient to subject to profound statistical study. However, a number of apparent trends will help in defining future studies. A large number of children who have both language and articulation disturbances also have associated motor, adaptive, or personal-social developmental delays. An extremely large percent also have positive electroencephalographic findings.
Duration: 1964-not reported.
Investigator(s): Daniel Halpern, M.D., Auke Tellegen, Ph.D., Clinical Psychologist, and Marjorie Thorpe, B.S., Occupational Therapist, Department of Physical Medicine and Rehabilitation, Medical Center, University of Minnesota, Minneapolis, Minn. (Reported by Frederic J. Kottke, M.D., Ph.D., Professor and Head, Department of Physical Medicine and Rehabilitation.)

18-T-32 STUDIES ON THE POSTURAL ATTITUDES OF CHILDREN WITH DAMAGED CENTRAL NERVOUS SYSTEM

Purpose: To study: (1) influence of sensory function in the development of a balanced posture; (2) relationship of time and reproducibility of response on

the development of postural reflexes; (3) relative influence of antagonistic reflexes on the postural attitude; and (4) effect on posture of abtunding or abolishing various sensory stimuli.
Methods: The influence of different sensory modalities in determination of verticality will be evaluated. Modalities chosen are those generally considered to have influence on postural adjustment--muscle receptors in the neck, proprioceptors of the cervical and lower vertebral joints, static vestibular sensation, and tactile and pressure sensation. A systematic study in normals is planned in which individuals will be subjected to lateral body tilt, with and without muscle activity, head tilting alone, body tilting alone, and application of weights to exert traction laterally to head to maintain active muscle contraction in muscles on one side of neck. Effect of each of these procedures on individuals' ability to determine verticality of an external object, such as a luminous rod, or of the body of the individual when tilted, will be used as criterion. By factorial analysis, influence of each modality may be inferred.
Duration: 1964-not reported.
Investigator(s): Daniel Halpern, M.D., Richard Owen, M.D., Psychiatrist, and Auke Tellegen, Ph.D., Psychologist, Department of Physical Medicine and Rehabilitation, Medical Center, University of Minnesota, Minneapolis, Minn.
(Reported by Frederic J. Kottke, M.D., Ph.D., Professor and Head, Department of Physical Medicine and Rehabilitation, Medical Center, University of Minnesota.)

18-T-33 NEONATAL SEIZURE STATES

Purpose: To investigate etiology, diagnosis, and prognosis of neonatal seizure states.
Subjects: Newborns having seizures in first two weeks of life.
Methods: Clinical evaluation and follow-up for four years; EEG, serial studies.
Findings: Initial study reveals difficult prognostic value of most clinical methods for neurological study of newborn, while significantly helpful data were obtained from serial EEG.
Duration: 1960-1966.
Investigator(s): Cesare T. Lombroso, M.D., Ph.D., Director, Seizure Unit and Laboratories, Department of Neurology, Children's Hospital Medical Center, Boston, Mass.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Ten papers in press.

18-T-34 ATTITUDES OF TEACHERS TOWARD CHILDREN WITH SEIZURES

Purpose: To ascertain teacher information concerning epilepsy and teacher attitudes toward children with epilepsy.
Subjects: 700 elementary and secondary teachers in public schools of Minneapolis.
Methods: Questionnaire to which teachers respond: 5 identifying facts about teachers; 12 questions concerning information and attitudes.
Duration: December 1963-September 1964.
Investigator(s): Dewey G. Force, Jr., Ph.D., Associate Professor of Special Education, University of Minnesota, Minneapolis, Minn.
Cooperating group(s): Minnesota Epilepsy League.
Publication: Report to be submitted to Minneapolis Public Schools and Minnesota Epilepsy League.

18-T-35 FAMILIAL CONSEQUENCES OF CHILDREN WITH CEREBRAL DEFECTS

Purpose: To find ways of studying the impact of brain-damaged children upon their families, with particular reference to low income and ethnic minority groups.
Subjects: (1) Low income and minority group families with cerebrally damaged children; (2) families at high risk of having a cerebrally damaged child or families in which such children already live but where identification has not been made by or to the family; and (3) comparison families in low income and minority groups with normal children.
Methods: A social research unit will adapt field interview methods to study family structure and behavior, as related to identification of brain damage in a child. Families are selected from: (1) rosters of those seeking service in a health center for reasons other than brain damage; (2) among families in the long-term collaborative roster of children with identifiable neurological defect; and (3) ultimately among families entering the collaborative project who are considered to be at high risk. Emphasis is placed upon structured interview methods applied in field.
Duration: September 1963-September 1965.
Investigator(s): Howard Kelman, Ph.D., Assistant Professor of Preventive Medicine, and Jonas N. Muller, M.D., Chairman and Professor of Preventive Medicine, New York Medical College, New York 29, N. Y.
Cooperating group(s): Association for the Aid of Crippled Children.

18-T-36 OPERANT CONDITIONING WITH BRAIN-DAMAGED CHILDREN

Purpose: To determine the efficacy and extent to which operant conditioning approaches may be used to establish auditory discrimination and receptivity for aural language with aphasic children.
Subjects: Nonverbal children, 5 to 10 years of age, diagnosed as having central nervous system dysfunctions.
Methods: Operant conditioning; reinforcement for correct nonverbal responses.
Findings: Encouraging for establishing sound discrimination.
Duration: January-September 1964.
Investigator(s): Leija McReynolds, Ph.D. Candidate, and Jon Eisenson, Ph.D., Director, Institute for Childhood Aphasia, School of Medicine, Stanford University, Palo Alto, Calif.
Publication: To be submitted to appropriate journals at completion of study.

18-T-37 INVESTIGATION OF CORRELATION BETWEEN AUDIOMETRIC RESPONSES AND TEMPERATURE, BAROMETRIC PRESSURE, AND RELATIVE HUMIDITY IN CHILDREN WITH CEREBRAL PALSY

Purpose: To discover by mensuration whether there is variable hearing in children with cerebral palsy.
Subjects: Children of all ages with cerebral palsy.
Duration: March 1964-March 1965.
Investigator(s): Mary Ann Classon, M.A., Speech Therapist, D. C. Society for Crippled Children, 2800 Thirteenth St., N. W., Washington, D. C. (Reported by William P. Argy, M.D., Medical Director, D. C. Society for Crippled Children.)
Cooperating group(s): U. S. Weather Bureau.
Publication: To be published.

18-T-38 ABSTRACTION AND SOUND DISCRIMINATION ABILITIES IN CEREBRAL PALSIED AND MENTALLY RETARDED CHILDREN

Purpose: To investigate comparatively the abilities of these children in these two areas.

Subjects: 153 cerebral palsied children and 115 mentally retarded children, 6 to 17 years of age.
Methods: Administration of Irwin-Jensen Sound Discrimination Test and the Irwin-Hammill Abstraction Test to subjects.
Duration: 1963-1966.
Investigator(s): Don D. Hammill, Ph.D., Assistant Professor, and Orvis C. Irwin, Ph.D., Adjunct Professor, Institute of Logopedics, 2400 Jardine Dr., Wichita, Kans.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published in the Cerebral Palsy Review.

18-T-39 A FOLLOW-UP STUDY OF CHILDREN WITH CEREBRAL PALSY

Purpose: To assess change and correlates of change in a population of severely disabled children with cerebral palsy who were discharged to the community following long-term inpatient rehabilitation treatment.
Subjects: A study sample will be drawn from children who were hospitalized on special children's unit at Bird S. Coler Hospital between 1956 and 1963.
Methods: Present health, social, and physical status of those children discharged to community will be assessed through field interview and examination by a nurse and a social worker. Families will also be studied. Present status will be compared with status at time of admission and discharge from hospital. Information will also be gathered from health and health related agencies with whom child or family has had contact since discharge.
Duration: March 1964-1966.
Investigator(s): Howard R. Kelman, Ph.D., Assistant Professor, Departments of Preventive Medicine and Physical Medicine and Rehabilitation, Jonas N. Muller, M.D., Professor and Chairman, Department of Preventive Medicine, and Milton Lowenthal, M.D., Professor and Chairman, Department of Physical Medicine and Rehabilitation, New York Medical College, 1 East 105th St., New York 29, N. Y.
Cooperating group(s): New York State Health Department.

18-T-40 FOLLOW-UP STUDY OF CHILDREN FORMERLY ENROLLED IN THE SCHOOL FOR CEREBRAL PALSIED CHILDREN, SOUTHERN CALIFORNIA

Purpose: To correlate medical, psychological, sociological, and educational findings.
Subjects: 450 children, 3 to 17 years of age, with impairment of the central nervous system, who are residents of the 10 counties in Southern California.
Methods: Data will be interpreted after reducing them to a series of smaller projects or topics with questions suitable for data processing cards.
Duration: July 1964-June 1966.
Investigator(s): Melba M. Miller, Ed.D., Superintendent, School for Cerebral Palsied Children, 4339 E. State College Dr., Los Angeles, Calif. 90032.
Publication: To be submitted to medical, psychological and/or educational journals as appropriate.

18-T-41 BEHAVIOR AND CHRONIC DISEASE: A STUDY OF CHILDREN WITH DIABETES

Purpose: To compare the behavior of a group of children having a chronic disease (diabetes) with a normal group; to study the relationship between behavior and disease symptomatology.
Subjects: 16 male and 11 female diabetics between 8 and 12 years of age; a normal control group matched for I.Q., age, and sex.
Methods: Use of a newly developed technique standardized on normal children

and allowing objective scoring of children's responses to neutral stimuli (Emotional Perception Scale); categorization of disease symptomatology by laboratory findings and medical information.
Findings: Children with diabetes differ in behavior from normal children. Mean score for measure of behavior fell in behavior disorder range established in other research. Those children whose disease symptoms were more difficult to control showed more evidence of behavior disorder.
Duration: October 1963-July 1964.
Investigator(s): Theron Alexander, Ph.D., Associate Professor of Psychology in Pediatrics, and Charles H. Read, M.D., Professor of Pediatrics, State University of Iowa, Iowa City, Iowa.
Publication: To be published in a professional journal.

18-T-42 CONGENITAL HEART DISEASE: ITS MEANING TO THE AFFECTED CHILD AND HIS FAMILY

Purpose: (1) To determine the effect of a child's congenital heart disease on family life and on child's adjustment; (2) to investigate some of the factors that might influence the degree of effect of congenital heart illness; and (3) to compare characteristics of a group of children with congenital heart disease with a matched group of normal children.
Subjects: 20 experimental children, 4 to 14 years old (and their families), were admitted over a 5-month period to University of Florida Medical Center for cardiac catheterization. Normal control children were matched with experimental children for age, sex, race, I.Q. and socio-economic position.
Methods: Information dealing with effect of congenital heart illness on family was elicited through parent-focused interviews. MMPI tests were given to each parent. Experimental and control children were given an intelligence test followed by a focused interview involving H-T-P, Draw Inside of Body Test, and sentence completion tests. Also, a cardiologist classified severity of each child's illness using function classification employed by American Heart Association.
Findings: Thus far: (1) actual severity of child's illness was not related to degree of overprotectiveness nor to degree of effect of illness on family life; (2) mothers who distorted severity of their child's heart disease tended to overprotect their children more than mothers who perceived their child's illness accurately; (3) illness had a significantly greater effect on family life when mothers distorted severity of child's illness; and (4) the longer the family had lived with knowledge of child's illness, the greater the effect of disease on family life.
Duration: April 1963-June 1965.
Investigator(s): David R. Offord, M.D., Instructor in Psychiatry, and Joseph F. Aponte, B.S., Research Assistant, Department of Psychiatry, University of Florida, Gainesville, Fla.
Cooperating group(s): Florida State Board of Health.

18-T-43 ADAPTATIONAL AND DEFENSIVE BEHAVIOR IN YOUNG HEMOPHILIACS AND THEIR PARENTS

Purpose: To determine whether psychological factors influence the course of hemophilia; to study coping strategies, defensive behavior, and ensuing success or failure of adaptation of both child and parent.
Subjects: 32 hemophilic boys and their parents. Majority of children are between ages of 6 and 18. Of the 22 families, 9 have more than one hemophilic child. High clinical severity and diagnosis before age one characterize most of patients.
Methods: Subjects followed for up to two years by psychiatric interviewing and observations during children's numerous admissions. Hospital records and conferences with pediatricians have been used to amplify information about children's past history.

Findings: (1) A majority of patients and parents show good to optimum adaptation to hemophilia and its complications; (2) eight hemophiliacs show failure of adaptation due to deviation from optimum range of defensive behavior; (3) characteristic sequence of defensive techniques is used by most patients and parents as part of coping process; and (4) psychophysiological mechanism of bleeding, superimposed on the organic defect is evidenced.
Duration: January 1963-continuing.
Investigator(s): Ake Mattsson, M.D., Instructor in Child Psychiatry, Western Reserve University, 2040 Abington Rd., Cleveland 6, Ohio. (Reported by Willard D. Boaz, M.D., Director, Department of Child Psychiatry, Western Reserve University.)
Publication: To be submitted for publication to a pediatric and a psychiatric journal in 1965.

18-T-44 CLINICAL EVALUATION OF EXPERIMENTAL ORTHOTIC DEVICES AND PROCEDURES

Purpose: (1) To determine validity of principles of prescription for new devices; (2) to document in detailed manner indications and contraindications for new devices; (3) to test new materials for use in orthotic devices; (4) to develop new methods for alignment and fitting; and (5) to evaluate effectiveness of experimental devices.
Subjects: Present caseload of 25 children, ages 2 to 14, having variety of orthopedic and neuromusculoskeletal disorders.
Methods: Subjects are being examined to establish adequate criteria for design of devices. There is a cooperative effort with physicians, engineers, and orthotists to attempt to design devices to resolve problems.
Duration: November 1961-October 1964.
Investigator(s): Verne T. Inman, M.D., Ph.D., Professor of Orthopedic Surgery and Director, Biomechanics Laboratory, San Francisco Medical Center, University of California, San Francisco, Calif.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

18-T-45 CHILD AMPUTEE PROSTHETICS PROJECT

Purpose: (1) To explore the feasibility of prosthetics for children with one or more missing limbs and to establish optimum ages for initial fitting; (2) to establish the extent and type of training techniques necessary; (3) to devise suitable components for all types of limb prostheses; (4) to explore the psychological involvement of limb-deficient children and their parents, and to devise methods of preventing or alleviating these conditions; and (5) to collect data on prenatal and family histories for etiological studies.
Subjects: Clinical caseload of over 230 limb-deficient children.
Methods: Study of children; research and development of new devices and experimental fitting on children. Each member of the professional research staff is conducting independent research either alone or collectively with other staff members.
Findings: Scaled-down adult components used on children have fallen far short of satisfying children's many needs. Definite skills and techniques are necessary in fabrication and in fitting of growing children. Even with the most accurately devised and fitted prosthesis, failure will result without accurate and sustained occupational and physical therapy. The family requires prompt, adequate, and sustained care during this critical period as the shock of the birth of a limb-deficient child or an acquired amputation is much deeper than has been previously recognized. The medical health of these children is comparable with the child of the average population. Surgical requirements are infrequent, but extremely important. Consultation with a surgeon in this field is necessary before any surgical procedures for anticipated prosthetic use.

Duration: 1955-indefinite.
Investigator(s): Milo B. Brooks, M.D., Medical Director, and staff, Child Amputee Prosthetics Project, University of California, Los Angeles, Calif.
Cooperating group(s): California Crippled Children Services; National Academy of Sciences; National Research Council; Subcommittee on Children's Prosthetics Studies, Research Division, New York University.
Publication: Annual reports, 1956 through 1963; *The Limb-Deficient Child*, University of California Press; Inter-Clinic Information Bulletin.

THE CHILD IN THE FAMILY

Family background and relations

18-U-1 A LONGITUDINAL STUDY OF FERTILITY IN DETROIT AREA WITH SPECIAL REFERENCE TO ECONOMIC STATUS, UNEMPLOYMENT, AND FAMILY GROWTH

Purpose: To investigate the social and economic factors associated with various patterns of fertility, family growth, and expectations for future births; to investigate the reliability of expectations about family size as a basis for predicting aggregate and individual fertility; and to assess the factors affecting stability of such expectations.
Subjects: Initially based on probability sample of about 1,300 women who had a first, third, or fourth birth in July 1961 or were married that month in Detroit Metropolitan area.
Methods: Initial interviews were held and all women were reinterviewed twice at intervals of a year to check on changes in fertility, expectations, employment and economic position, etc.
Findings: After three interviews, there is remarkable stability in aggregate expectations about family size, resulting from stable expectations in about half the sample and many small compensating changes in the rest. Unexpected pregnancies are an important cause of upward changes in expectations. Unless a couple has a pregnancy in a rather short period following the interview, they are likely to change expectations downward. Catholics have much larger family size expectations than non-Catholics; however, Catholics' ideas are more changeable. The changes compensate and do not change relative position of Catholics and non-Catholics. Catholics least closely attached to the Church change most, presumably because they are under most cross-pressures between Church and general community. Those who were unemployed are even more likely to change, although changes are not necessarily downward. Illnesses, even if ranked as having major costs attached, were not associated with changes.
Investigator(s): Ronald Freedman, Ph.D., Professor of Sociology, and Director, and Lolagene C. Coombs, M.A., Research Associate, Population Studies Center, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Ford Foundation; Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Public Opinion Quarterly 28:112-117, 1964; other publications will be forthcoming in the next 18 months.

18-U-2 SOCIAL FACTORS AFFECTING FERTILITY AND FAMILY PLANNING IN TAIWAN

Purpose: To investigate the social, economic, and demographic factors affecting level and variations in fertility and family planning in Taiwan prior to an organized family planning program; to investigate what situations and types of people are involved in accepting family planning as part of a planned experimental program.
Subjects: Main group consists of 36,000 women, 20 to 39 years old, in Taichung, the fourth largest city. In addition, an intensive longitudinal study was done for a probability sample of 2,400 of these.
Methods: Accumulation of data involves: (1) registration data on population, births for entire city and its 2,400 neighborhood units; (2) intensive sample survey of 2,400 women; (3) short questionnaire interviews with random sample of 12,000 of these women visited at home; and (4) clinic records on 6,000 women who came to clinic for help with family planning.

Findings: In pre-program period there is great consensus on a moderate number of children, desire to learn about family planning that is general, and practice of several forms of family limitation by a significant minority; however, practice is so ineffective that even the most educated have more children than wanted by age 35 to 39. In an experiment to bring family planning to the people on a massive basis many more than 6,000 accepted; information about program was greatly aided by word-of-mouth diffusion. The great majority of requests were for intra-uterine devices. While lower socio-economic groups had done little to adopt family planning before, they were an important part of the accepting group afterwards.
Duration: June 1962-June 1966.
Investigator(s): Ronald Freedman, Ph.D., Professor of Sociology, and Director, Population Studies Center, and John Y. Takeshita, Ph.D., Assistant Professor of Sociology, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Population Council; Ford Foundation; Provincial Health Department of Taiwan.
Publication: Scientific American, May 1964; Population Studies, March 1963; a book will be prepared in the next two years.

18-U-3 PARENTS IN THE PERINATAL PERIOD

Purpose: To evaluate the nature, extent, background and origin of the problems faced by both parents in the perinatal period.
Subjects: (1) Primiparous parents attending a relatively expensive obstetric clinic; and (2) primiparous parents attending a clinic for patients on welfare or with a low income.
Methods: Tape recorded structured interviews with wives prepartum in the clinic and postpartum in their homes. A written questionnaire is filled out during their hospital stay. The husbands answer written questionnaires both prepartum and postpartum.
Duration: July 1960-June 1966.
Investigator(s): Norman F. Miller, M.D., Professor Emeritus, Department of Obstetrics and Gynecology, and John R. Gosling, M.D., Associate Professor, Department of Obstetrics and Gynecology, School of Medicine, University of Michigan, Ann Arbor, Mich. (Reported by Lois K. Rupke, R.N., Department of Obstetrics and Gynecology.)
Cooperating group(s): Maternal and Child Health Section, Michigan State Health Department.
Publication: Report made to the Maternal and Child Health Section of the American Public Health Association at the annual meeting, October 1962.

18-U-4 PSYCHOLOGICAL STRESS IN PREGNANCY

Purpose: To explore attitudes during pregnancy and their relation to physical complications during pregnancy, labor, and delivery and to the physical status of the neonate.
Subjects: 156 pregnant women at Children's Hospital.
Methods: A pregnancy attitude questionnaire was administered to all subjects; 54 were retested with same questionnaire four to six weeks after delivery. Prenatal, delivery, and neonatal data were analyzed in relation to attitudes.
Findings: Anxiety and rejection of the pregnancy were associated with more health problems in pregnancy, but not significantly with greater physical complications of the total pregnancy experience, including labor and delivery. Sexual attitudes were highly associated with the pregnancy experience.
Duration: 1960-1964.
Investigator(s): Martin I. Heinstein, Ph.D., Research Psychologist, Bureau of Maternal and Child Health, California State Department of Public Health, Berkeley 4, Calif.

Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted for journal publication in late 1964 or early 1965.

18-U-5 FAMILY STRUCTURE AND INTERPERSONAL RELATIONS

Purpose: To discover any existing linkage between authority structure in families (patriarchal, matriarchal, or equalitarian) and quality of relationships between husband and wife, child and parents, and child and his peers.
Subjects: (1) 850 students in grade 8, most from schools in northern Indiana, some from localities in Pennsylvania and Kansas; (2) 605 students in grade 8 from schools in Frankfurt, Germany.
Methods: Self-reporting questionnaires (translated for German subjects) administered in classroom situation arranged during school hours.
Findings: Equalitarian families are somewhat favored over patriarchal and matriarchal types in regard to scores on interpersonal relationships scales. Scores are lowest for matriarchal families. Differences in scale scores between rural and urban families were found to be insignificant.
Duration: January 1963-summer 1965.
Investigator(s): J. Howard Kauffman, Ph.D., Professor of Sociology, Goshen College, Goshen, Ind.
Cooperating group(s): National Science Foundation.
Publication: Articles in preparation.

18-U-6 FAMILY AND SCHOOL SOCIALIZATION

Purpose: To examine three potentially salient socialization variables, postulated in earlier work by Larson and Myerhoff. Specifically, to determine the extent to which these variables, separately and in combination, are associated with the acceptance of culturally provided goals--in this case, goals surrounding success in school.
Subjects: Adolescent boys, their fathers and mothers; in all, 148 families are involved.
Methods: Four-hour interviews held with each family member (father, mother, and son) separately, but at the same time. Primary emphasis was on study of different types of correspondence in child-training practices. The three variables postulated cover a three-generation time span and three contemporary role positions and are titled "consistancy," "continuity," and "congruence." They are operationalized by means of interview data bearing upon practices used upon the parents of the subject boy, as well as those used upon the subject at present.
Duration: March-November 1964.
Investigator(s): William R. Larson, M.A., Project Head, Youth Studies Center, University of Southern California, Los Angeles 7, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be published in professional journals upon completion.

18-U-7 MOTIVATIONAL AND INCENTIVE FACTORS IN SOCIALLY INFLUENCED BEHAVIOR

Purpose: To study parent-child interaction and parental attitudes as antecedents of individual differences in susceptibility to social influence and pressures to conform.
Subjects: High school and college students.
Methods: Experimental assessment of conforming behavior; retrospective report

of perceived parental attitudes and parent-child interactions.
Duration: January 1962-December 1965.
Investigator(s): John W. McDavid, Ph.D., Associate Professor of Psychology, University of Miami, Coral Gables, Fla.
Cooperating group(s): Office of Naval Research, Department of the Navy, U. S. Department of Defense.
Publication: To be reported in Office of Naval Research technical reports and standard publication outlets.

18-U-8 PARENTAL ROLES IN THE SOCIALIZATION OF YOUNG ADULTS

Purpose: To examine nature of a postulated process of socialization which continues beyond adolescence and into early adulthood. Tentative model defines two aspects of such a process: (1) parental support toward extended education, new household formation, or career development as this serves to reinforce family's basic values; (2) relative competence of parents in giving advice to young adult offspring as this tends to guide specific implementation of family values. Research will test a set of hypotheses about these two aspects of continuing socialization as they may operate together in different types of families to maintain values from one generation to the next.
Methods: Design, building upon an earlier Rutgers study, will follow longitudinally two different samples in which offspring and their parents are studied at three different stages in family cycle.
Duration: 1962-1967.
Investigator(s): Matilda White Riley, Professor of Sociology, and staff, Rutgers, The State University, New Brunswick, N. J.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-U-9 PARENT-INFANT INTERACTION PATTERNS

Purpose: To identify primary mother-infant interaction patterns; to determine how these patterns are related to the early behavioral makeup of the infant, the preparental relationship of the mother and father, and the mother's early experience within her own family matrix. Sequencing of mother-infant interaction will be analyzed to determine probabilities of certain events leading to others. Analysis will be directed toward establishing the information yield of various events. In addition, sex differences and developmental changes in mother-infant behavior patterns will be studied for the first three months of life.
Subjects: 25 to 30 parent-infant combinations.
Methods: Direct observation in the home in order to make continuous recordings and ratings of selected maternal and infant behaviors. Two periods are studied during three-month intervals. Period one includes a cluster of three observations made at weekly intervals during first month of life to evaluate initial adaption process of mother and infant. Period two consists of another cluster of three observations made around three months when relatively stable patterns of behavior have been established. Each cluster includes one eight-hour and two three-hour observations. At seven weeks of age the infant with the mother and father spend an eight-hour laboratory session at the National Institutes of Health where tests are administered and interaction in various situations is evaluated.
Duration: January 1963-June 1964.
Investigator(s): Howard A. Moss, Ph.D., Psychologist, D. Wells Goodrich, M.D., Psychiatrist and Chief, Section on Family Development, Clinical Investigations, Child Research Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

18-U-10 STUDY OF NORMAL SEPARATION-INDIVIDUATION

Purpose: As an outcome of studies of symbiotic child psychosis (Bulletin 15, Research Relating to Children), to investigate the process of separation of the normal infant and toddler from his mother and, concomitantly, his developing individuation; to verify four subphases into which the normal separation-individuation phase can be divided, which grow out of the developing ego functions of the infant and are characterized by different developmental tasks and needs within mother-child unit.
Subjects: Normal mother-child pairs, with infants ranging from 2 to 3 months up to toddlers of 36 months; 6 to 8 mother-child pair subjects at any given period, recruited from available and interested neighborhood mothers.
Methods: Primarily an observational study of a limited longitudinal design (i.e., each mother-child pair followed intensively for approximately three years). Observations of a clinical and a more structured nature carried out by participant observers and by nonparticipant observers and raters (from a one way mirror booth), supplemented by interviews carried out by senior clinical workers, by home visits, and by formal testing.
Duration: September 1963-August 1968.
Investigator(s): Margaret S. Mahler, M.D., Director of Research, Masters Children's Center, 75 Horatio St., and Clinical Professor of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: The Psychoanalytic Study of the Child, Vol. 18, 1963; other publications planned.

18-U-11 PARENTS' SOCIAL LEARNING HISTORY AND FAMILY DYNAMICS

Purpose: To study effects of family constellation variables on dominance and conflict variables.
Subjects: College students.
Methods: Questionnaire.
Duration: April 1964-April 1965.
Investigator(s): James C. Baxter, Ph.D., Department of Psychology, University of Kentucky, Lexington, Ky.

18-U-12 KINSHIP SYSTEMS AND EMOTIONAL DISTURBANCE IN CHILDREN

Purpose: To determine whether various characteristics related to kinship in American society affect socialization of children adversely. Study is exploratory and is aimed at developing procedures for a more focused investigation.
Subjects: Several samples representing about 200 respondents have been used in the development of procedures. Core of study is comparison of: (1) families residing in Champaign-Urbana area, having a child under treatment for emotional disturbance, with (2) families of comparable ethnic and socio-economic background in which all children are considered by parents and friends as "normal".
Methods: Parents residing in Champaign-Urbana area have been interviewed in their homes and asked to complete questionnaires pertaining to kinship, family relationships, and description of child behavior.
Duration: July 1962-June 1965.
Investigator(s): Bernard Farber, Ph.D., Professor of Sociology, Institute for Research on Exceptional Children, University of Illinois, Urbana, Ill.
Cooperating group(s): Illinois Department of Mental Health.

18-U-13 PARENTAL AUTHORITARIANISM AND CHILDREN'S EMOTIONAL DISTURBANCE

Purpose: To investigate extent to which parents' authoritarian values are associated with severity of children's disturbance.
Subjects: Experimental group of child psychiatric patients; control group of matched normal children.
Methods: Careful matching of children and parents for pilot study; long-range survey of child psychiatry patients and their families for extensive study.
Findings: In pilot study, it was found that parental authoritarian values do differentiate normal and control groups.
Duration: 1961-1975.
Investigator(s): Paul L. Adams, M.D., Assistant Professor of Psychiatry and Pediatrics, J. Hillis Miller Health Center, University of Florida, Gainesville, Fla.
Cooperating group(s): Florida Council on Mental Health Training and Research.
Publication: Initial phase of pilot study to be published in American Journal of Psychiatry.

18-U-14 A COMPARATIVE STUDY OF CERTAIN MOTHER-CHILD RELATIONSHIPS WITH DISTURBED CHILDREN AND WITH THEIR SIBLINGS

Purpose: To explore differential relationships which individual mothers have with their children whom they consider well-adjusted and with their children whom they consider disturbed; to furnish suggestions which will be helpful in the therapeutic treatment of mother and child.
Subjects: 20 family units (mother, "disturbed" child, and normal child), selected from families whose children are undergoing diagnostic study at the Child Study Center of Philadelphia. All children are known to be brain-damaged, psychotic, mentally defective, or physically handicapped.
Methods: (1) Tests administered to mothers include Taylor Anxiety Scale, an attitude scale specifically devised to determine a numerical index into mother's psychological needs as they relate to each of her children, and the Thematic Apperception Test. (2) Tests administered to children consist of an attitude scale, similar to the one for mothers, to measure psychological needs in same areas, Children's Manifest Anxiety Scale, and the Thematic Apperception Test.
Duration: October 1963-February 1965.
Investigator(s): Beverly Todd (Ed.D. Candidate, Temple University), Staff Psychologist, Child Study Center of Philadelphia, 110 N. 48th St., Philadelphia, Pa.
Publication: Dissertation to be on file at Temple University.

18-U-15 ROLE PERCEPTIONS IN FAMILIES OF DISTURBED CHILDREN

Purpose: To elucidate patterns of role perceptions which characterize families of differing types of disturbed children; to determine how these patterns differ from those of normal families.
Subjects: Children who are patients in the Child Psychiatry Clinic, University of Washington Hospital, and their families.
Methods: Questionnaire and interview methods; questionnaire material contains both projective and direct questions as well as a picture method.
Duration: June 1964-January 1965.
Investigator(s): Leslie Y. Rabkin, Ph.D., Instructor in Psychiatry, Medical School, University of Washington, Seattle, Wash. 98105.
Publication: To be published in a psychological journal.

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18-U-16 PARENTS' GROUP PSYCHOTHERAPY EXPERIENCE AS RELATED TO CHILDREN'S ADJUSTMENT

Purpose: To determine relationships between parent participation in group psychotherapy and follow-up study of children's adjustment.
Subjects: Both parents from 22 families who had sought psychological service for problems relating to their children's adjustment from the Michigan State University Psychological Clinic one to five years earlier.
Methods: Evaluation of parent's comments and ratings of changes in each child's adjustment following parental group psychotherapy.
Findings: At time of post-therapy follow-up, about 90 percent of parents described their children as better adjusted; improvement was especially noticeable in academic performance, and to a lesser degree, in family relationships.
Duration: 1963-1964.
Investigator(s): John R. Hurley, Ph.D., Associate Professor, and Robert L. Hohn, M.A., Department of Psychology, Michigan State University, East Lansing, Mich.
Publication: To be published in either American Journal of Orthopsychiatry or International Journal of Group Psychotherapy.

18-U-17 COMPARATIVE STUDY OF CHILDREN FROM "NORMAL" FAMILIES AND FROM FAMILIES IN WHICH A PARENT IS PSYCHOTIC

Purpose: To attempt to assess effect of family psychosis on the development of children.
Subjects: Children of normal parents (hospitalized and nonhospitalized); children of psychotic parents (hospitalized and nonhospitalized).
Methods: Phase I: screening by means of family questionnaire, symptom inventory, and Vineland. Phase II: intensive extended home visit, psychological testing, psychiatric interview, and developmental evaluation (for younger children).
Duration: January 1964-June 1965.
Investigator(s): Joan K. Barber, M.D., Director, Preventive Service, Division of Social and Community Psychiatry, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, Bronx, N. Y.

18-U-18 LEVEL OF PSYCHOSOCIAL ADJUSTMENT IN CHILDREN OF IDENTIFIED SCHIZOPHRENIC MOTHERS

Purpose: To investigate level of adjustment in children of mothers hospitalized for a schizophrenic disorder, and relationship between parent's level of pathology and child's current adjustment level.
Subjects: Children, 6 to 11 years old, attending public schools. Offspring of schizophrenic mothers (N=96) will be compared with children of psychoneurotic mothers (N=48), of chronically physically ill (N=48), and with children of mothers with normal adjustment patterns (N=48), with groups matched for age, sex, and parent's socio-economic status.
Methods: Parents will be interviewed with standard questionnaires on child's behavioral adjustment indices, and independent measures of adjustment of child will be obtained through the schools by means of teacher ratings, self inventories and sociometric techniques previously standardized in studies in California Public Schools. Parental pathology will be measured by psychological tests and ratings of hospital case material.
Duration: July 1964-June 1966.
Investigator(s): Arnold R. Beisser, M.D., Chief of Professional Education, and Norbert Glasser, Ph.D., Clinical Psychologist II, Metropolitan State Hospital, 11400 S. Norwalk Blvd., Norwalk, Calif.

Cooperating group(s): Research Division, California Department of Mental Hygiene.
Publication: Publication planned in psychological journals; progress reports in *California Mental Health Research Digest*.

18-U-19 MANAGEMENT AND EVALUATION OF A JOINT ADMISSION PROGRAM

Purpose: To test hypothesis that separation of the child from his psychotic mother increases her guilt, prevents development of positive feelings, and offers no opportunity for day-to-day experience with the child nor for direct therapeutic investigation of her relationship with the child. Also, to gather information on: (1) characteristics of women who have psychiatric disorders in the post-partum period; (2) introduction of joint admission to a large state hospital and methods of management found most useful; and (3) effectiveness of joint admission.
Subjects: 17 infants and young children cared for by their mothers in adult wards of the Massachusetts Mental Health Center during period mothers were in treatment for fairly severe emotional disturbances; mother-child pairs in which the disturbed mother was separated from her child during hospital treatment.
Methods: Patients studied carefully with full psychiatric work-up, psychological testing, and interviews with family members.
Duration: 1963-1966.
Investigator(s): Henry U. Grunebaum, M.D., Staff Psychiatrist, Justin L. Weiss, Ph.D., Chief, Clinical Psychology Service, and Louis Sander, M.D., Child Psychiatry Consultant, Massachusetts Mental Health Center, Cambridge, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-U-20 COUPLE-GROUP THERAPY

Purpose: A clinical study of the psychodynamics of parents of disturbed children.
Subjects: Couples manifesting marital and other problems who originally came to therapy with reference to a disturbed child.
Methods: Study of parents as couples, using couple-group therapy.
Duration: 1964-1965.
Investigator(s): Martin Megdal, M.D., Fellow in Child Psychiatry, and Irvin A. Kraft, M.D., Chief, Division of Child Psychiatry, Houston State Psychiatric Institute, Houston, Tex.

18-U-21 IMPACT OF THE LAW UPON THE MENTAL, PHYSICAL, AND MORAL HEALTH OF THE FAMILY UNIT

Purpose: The initial phase is a comprehensive socio-legal study of childhood mental retardation, covering every significant area from detection of the child's retardation through the various phases of his education, treatment and training as a basis for a brief in support of the thesis that the institutionalized mentally retarded child has a legal right to therapy and treatment in accordance with sound prevailing medical norms. A Model Code on Mental Retardation will be drafted along with a brief in support of its adoption by the states. The second phase will enlarge upon the first by a study of legal problems of children generally in context of the family unit. This phase will include a study of the family as a legal unit with emphasis on problems of child custody, child support, paternity, guardianship, adoption and annulments, and the need for establishment of family courts to function in these problem areas.

Duration: 1964-indefinite.
Investigator(s): David W. Louisell, LL.B., Professor of Law, Arthur H. Sherry, LL.B., and Bernard L. Diamond, M.D., Professors of Law and Criminology, and Staff, University of California, Berkeley 4, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-U-22 A STUDY OF BATTERED CHILD LEGISLATION

Purpose: To identify and formulate the issues arising from the drafting of child abuse statutes through a study of the legislative settings in which such laws were enacted; to determine what reporting has, in fact, occurred and what other consequences have taken place in cases arising after the enactment of child abuse legislation.
Duration: 1964-indefinite.
Investigator(s): Monrad G. Paulsen, J.D., Professor of Law, and Graham E. Parker, J.D., Research Associate, School of Law, Columbia University, New York, N. Y. 10027.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-U-23 PARENTS OF BATTERED CHILDREN

Purpose: To gain understanding of the problem of why parents attack children. To get a clearer picture of dynamics of such behavior and to explore possibilities of treatment and prevention.
Methods: Parents of battered children will be studied in as much depth and for as long a time as possible. Psychiatric interviews and psychological testing will be employed whenever possible. Home visits will be made by social workers and joint interviews with parents, psychiatrist, and social worker will be held.
Duration: 1962-indefinite.
Investigator(s): C. Henry Kempe, M.D., Professor and Head, Department of Pediatrics, and Brandt F. Steele, M.D., Associate Professor, Department of Psychiatry, University of Colorado School of Medicine, Denver 20, Colo.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-U-24 A STUDY OF BATTERED CHILDREN IN DENVER

Purpose: To acquire general information concerning battered children and their families: types of injuries, family characteristics, attitudes, and behavior patterns; to study effects of injury on children's behavior; to study actions taken by Denver Welfare Department, police, and courts; and to analyze implications for the city.
Subjects: Caseload of all battered children in Denver for one year.
Methods: Statistical analysis of actions taken on behalf of battered children, family patterns and attitudes, battered children's behavior.
Duration: June 1964-June 1965.
Investigator(s): Betty Johnson, M.S.W., Supervisor, Child Welfare Services, and Harold Morse, B.A., Supervisor, Research and Statistics, Denver Department of Welfare, Denver 4, Colo.

18-U-25 A FOLLOW-UP STUDY OF NEGLECTFUL PARENTS

Purpose: To learn how parents of 33 families who were once considered neglectful by a protective agency were caring for their children two years after their cases were closed as "service completed".
Methods: Families were interviewed in their homes with prepared schedule. Minimum standards of care were also developed as a base for questions used in the schedule and for use in future research.
Findings: A majority of families were not giving their children proper care and needed community services that were more integrated, comprehensive, and sustained. The greater proportion needed help with problems of loneliness, relationships, and their lack of skills in home management.
Duration: Not reported-1963.
Investigator(s): Gordon Kingsford Askwith (Doctoral Candidate, University of Pennsylvania School of Social Work), 1869 Crystal Crescent, London, Ont.
Cooperating group(s): Pennsylvania Society for the Protection of Children from Cruelty.

18-U-26 PROBATION SERVICES FOR ADULTS FOUND GUILTY OF CHILD NEGLECT

Purpose: Primary goal is child protection, through the modification of attitudes and behavior patterns of the adult offender, to the degree that his or her children are no longer placed in jeopardy. It is recognized that the complete reformation of adult offenders in this area is unlikely; and realistically, probation officers of the juvenile court have neither the skills nor the facilities to deal effectively with the total range of problems presented by such offenders and their families. However, this program reasonably expects to: (1) better equip the probationer to cope with the pressures and responsibilities of parenthood; and (2) motivate the probationer and his or her family toward improved status by revealing opportunities for self-improvement where the subject sees no such opportunities.
Subjects: Neglectful parents involved in cases in which removal of the children from the home and/or incarceration of one or both parents is not necessary and the family remains intact following the court's finding of neglect.
Methods: Individualized casework, group counseling. Initial evaluation is to be made in June 1964.
Duration: June 1963-continuing.
Investigator(s): Frederic L. Faust, ACSW, Director of Court Services, and staff, Franklin County Court of Domestic Relations, 50 East Mound St., Columbus, Ohio 43215. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1963-1964.)

18-U-27 A COMPARATIVE STUDY OF SOME ASPECTS OF FAMILY FUNCTION IN CHILDREN WITH ACTUAL AND PREDICTED READING DISABILITY AND CHILDREN WITH READING COMPETENCE

Purpose: To determine incidence of family pathology in located groups of children with reading disability. Specifically, to test hypothesis that there will be a greater degree of psychopathology in families: (1) with children having established reading disability; or (2) with children having a school prognosis for reading disability than will be found in control families in which the children either have no reading disability or are predicted not to acquire it.
Subjects: 48 boys and 12 girls from a large public elementary school in New York city, divided into 4 groups of 15 children each: (1) Reading Disability Group (3rd and 4th graders designated by school as having a reading disability of at least 18 months); (2) Reading Disability Control Group (children of same age and grade who were competent readers); (3) Predicted Reading Disability

Group (second graders who had during the previous school year scored below the 50th percentile on a routine reading readiness test); and (4) Predicted Reading Disability Control Group (selected in parallel fashion to group 2).
Methods: Family questionnaire administered separately to mothers and fathers of all four groups. Four critical areas of family functioning were sampled with four scales on questionnaire: (1) Husband-Wife Attitudinal Difference Scale; (2) Symptom Scale (feeding problems, toilet problems, general family problems); (3) Maternal Role Adequacy Scale; and (4) Father's Work Role Adequacy Scale.
Findings: Presented at Annual Meeting of American Orthopsychiatric Association, Chicago, March 1964.
Investigator(s): Israel Zwerling, M.D., Ph.D., Director, Division of Social and Community Psychiatry, and Marilyn Mendelsohn, M.S.W., Instructor in Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-U-28 PARENTS AS IDENTIFICATION MODELS AND REINFORCERS OF CHILDREN'S ACHIEVEMENT BEHAVIOR

Purpose: To elucidate and evaluate the influences of parents and elder siblings on children's achievement development; to study attitudinal and motivational characteristics of children predictive of their achievement behaviors; to systematically vary attributes of achievement situations to determine effects of these treatments on children's achievement performance; to study interactive effects of personality and situational variables on those behaviors.
Subjects: Children, ranging in age from birth to college age, from Fels longitudinal sample, surrounding community (and parents), selected schools in Greene County School System, and Antioch College.
Methods: Interviews, specially constructed questionnaires, behavioral observations in situ and in experimental sessions, rating scales, records from Fels longitudinal files and school files, etc.
Duration: 1959-indefinite.
Investigator(s): Virginia C. Crandall, M.A., Research Associate, Fels Research Institute, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Numerous articles in Child Development, Journal of Consulting Psychology, Journal of Genetic Psychology, and others.

18-U-29 CHILD DEVELOPMENT AND ADOPTION STUDY

Purpose: To study differential interactions between different types of mothers and children.
Subjects: Children adopted in infancy.
Methods: Longitudinal study involving repeated interviewing of mother, and filming and psychological testing of child.
Duration: 1960-indefinite.
Investigator(s): Peter B. Neubauer, M.D., Director, Child Development Center, 120 W. 57th St., and Vera D. Bernard, M.D., Clinical Professor of Psychiatry, College of Physicians and Surgeons, Columbia University, New York, N. Y.

18-U-30 PRELIMINARY INVESTIGATION OF PARENTAL ATTITUDES TOWARD ADOPTED CHILDREN

Purpose: To assess and compare parental attitudes, personality structure, and

demographic variables among parents of adopted, emotionally disturbed, and normal children, seeking variables contributing to higher incidence of emotional disturbance in adopted children than expected from incidence of adopted children in general population.
Subjects: 50 parents each of: (1) adopted emotionally disturbed children; (2) adopted nondisturbed children; (3) nonadopted, nondisturbed children; and (4) nonadopted, disturbed children.
Methods: Administration of PARI (as modified by investigators), MMPI, and Shipley-Hartford.
Duration: 1962-1965.
Investigator(s): Paul V. Carlson, Ph.D., Assistant Professor of Medical Psychology, James Q. Simmons III, M.D., Senior Psychiatrist and Chief, Child Psychiatry (Inpatient Service), and Henry H. Work, M.D., Head, Division of Child Psychiatry, Neuropsychiatric Institute, University of California, Los Angeles 24, Calif.; Marshall Schechter, M.D., Medical Center, University of Oklahoma, Oklahoma City, Okla.

18-U-31 PARENTAL ATTITUDES TOWARD CHRONICALLY HANDICAPPED CHILDREN

Purpose: To study parental attitudes toward handicapped children; to ascertain whether attitudinal differences exist toward various chronic disease entities in children.
Subjects: Approximately 150 children representing problems in muscular dystrophy and cerebral dysfunction. Nonretarded, retarded, juvenile diabetic, and epileptic children will be investigated.
Methods: Parental Attitude Research Instrument.
Duration: February-December 1964.
Investigator(s): Eugene G. Roach, Ph.D., Chief Psychologist, Pediatric Neurology Clinic, Department of Neurology, Medical Center, Indiana University, Indianapolis, Ind.

18-U-32 EDUCATIONAL, VOCATIONAL, AND MARITAL ASPIRATIONS OF RURAL MOTHERS FOR THEIR ELEMENTARY SCHOOL CHILDREN

Purpose: To determine the aspirations rural parents hold for their elementary school children regarding education, vocation, and marriage; to determine relationships between these aspirations and certain social and economic variables.
Subjects: 338 rural mothers, each having a child in elementary school, randomly selected from school records of all elementary schools in two widely diverse counties.
Methods: Interview guide developed and pretested; tape-recorded interviews conducted with subjects in their own homes; interview data transcribed, coded, and electronically processed; Chi-square and other analyses performed.
Duration: June 1963-June 1965.
Investigator(s): Kate B. Garner, M.S., Research Instructor in Home Economics, University of North Carolina at Greensboro, Greensboro, N. C. 27412.
Cooperating group(s): Faculty Research Council, University of North Carolina at Greensboro; Agricultural Experiment Station, Raleigh, N. C.

18-U-33 THE TRANSMISSION AND MODIFICATION OF ATTITUDES AND BEHAVIOR PATTERNS OVER SUCCESSIVE GENERATIONS

Purpose: To arrive at a better understanding of how attitudes and interpersonal behaviors are transmitted and modified from one generation to the next.
Subjects: An American, urban, upper middle class kinship group of 25 members, including 2 sets of grandparents, 4 sets of parents, and 13 children.

Methods: Interviews conducted with each set of parents and grandparents. All four families observed interacting in two different situations, one consisting of four structured family tasks, and the other a dinner at which researcher was a guest. All material was tape recorded. Procedure for analyzing data will include: (1) categorization of content of interviews to reveal attitudes and value systems of parent and grandparent generations; and (2) use of a newly developed method for systematically observing family interactions. This method, which is being prepared for publication, provides profiles of each individual's primary motives when relating to other family members.
Duration: 1962-1965.
Investigator(s): Helene Borke, Ph.D., Research Associate, Western Psychiatric Institute and Clinic, Medical School, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in spring 1965.

18-U-34 THE DEVELOPMENT AND ADJUSTMENT OF NEGRO AMERICAN CHILDREN

Purpose: To study over a two-year period the development and adjustment of Negro American children in relation to their family structure ("intact" versus "broken" homes) and social status ("upper" versus "lower" socio-economic classes).
Subjects: Approximately 343 Negro American children, ages 6 to 10, in primary school grades.
Methods: Comprehensive schedules have been developed for recording school grades and tests, teachers' evaluations, and physical examinations, and for interviewing the children, mothers and a 25 percent stratified sample of fathers or father substitutes. Additional instruments employed with child include Stanford-Binet (Form L-M), California Test of Personality, and a short general achievement test to compare with school tests and grade.
Duration: December 1964-1966.
Investigator(s): S. Oliver Roberts, Ph.D., Chairman, Department of Psychology, and staff, Fisk University, Nashville 8, Tenn.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-U-35 RELATIONSHIP OF CHILDHOOD AND FAMILY BACKGROUND FACTORS TO PERSONAL AND HETEROSEXUAL ADJUSTMENT OF COLLEGE STUDENTS

Purpose: To determine nature and significance of family love and affection, parental discipline, and childhood associations and their relationship to personal and heterosexual adjustment of college students.
Subjects: 400 college males; 400 college females.
Methods: Personality tests, marital prediction inventories, and depth interviews.
Duration: January 1963-December 1964.
Investigator(s): Clifford R. Adams, Ph.D., Professor of Psychology, and David Shope, M.S., Rehabilitation Counselor, Pennsylvania State University, University Park, Pa.

18-U-36 RELATION OF ACCIDENT EXPERIENCE OF HIGH SCHOOL STUDENTS TO THAT OF THEIR FAMILIES

Purpose: To determine whether the family influences accident rates.
Subjects: 6,000 high school sophomores.

Methods: Questionnaire, group administered in classroom.
Duration: Spring 1963-spring 1965.
Investigator(s): William G. Mather, Ph.D., Research Professor of Sociology, Pennsylvania State University, University Park, Pa.

Child-rearing attitudes and practices

18-V-1 COMPARATIVE STUDY OF CHILD-REARING PATTERNS

Purpose: To make a comparative study of child-rearing patterns in European countries and in the United States.
Methods: Selected communities are being studied from an ethnological viewpoint; historical implications are also being evaluated.
Duration: 1955-1967.
Investigator(s): Alfred McClung Lee, Ph.D., Professor of Sociology and Anthropology, Brooklyn College, City University of New York, Brooklyn 10, N. Y.
Cooperating group(s): Graduate Division, Brooklyn College.

18-V-2 CHILDHOOD IN A PANTAGAMOUS SOCIETY

Purpose: A behavioral scientific analysis of child-rearing practices of nineteenth century Noyesian Perfectionists.
Methods: Case study materials from secondary and primary sources (personal documents: diaries, autobiographies, personal letters, etc.). Behavioral analysis of case study materials.
Findings: Assumption that monogamous kind of parent-child relationships are necessary for mental health is not supported by preliminary findings.
Duration: 1963-1965.
Investigator(s): Robert M. Frumkin, Ph.D., Research Editor, Journal of Human Relations, 3427 Dellwood Rd., Cleveland, Ohio 44118.
Publication: Research monograph to be published.

18-V-3 CHILD CARE PROVIDED BY MOTHERS IN SOUTH CAROLINA, PHASE III

Purpose: To obtain information about care of preschool and elementary school children provided by mothers in South Carolina. To test the hypotheses that there is a difference in child care provided in South Carolina by: (1) substitutes for employed mothers and mothers who do not work outside the home; (2) mothers who are employed in mills and mothers who are employed in professional occupations; and (3) employed mothers of preschool children and employed mothers of elementary school children. To identify the modal kinds of reorganizations of families when mothers work. To compare child care patterns in South Carolina with patterns in Massachusetts as reported by Sears, Maccoby, and Levin in Patterns of Child Rearing.
Subjects: 91 mothers randomly selected from each of 34 counties.
Methods: Instrument used by Sears, Maccoby, and Levin was employed. Interviews were taped by home demonstration agents who had been trained to conduct interview record on tape which was coded and analyzed.
Duration: 1962-August 1964.
Investigator(s): Kathryn Summers Powell, Ph.D., Professor of Home Economics, Winthrop College, Rock Hill, S. C.
Cooperating group(s): Clemson-Winthrop Home Economics Research Council.
Publication: Experiment Station Bulletin (Clemson University).

18-V-4 IMPACT OF PARENTAL EXPERIENCE UPON PARENTAL CHILD-REARING ATTITUDES

Purpose: To ascertain whether scores of persons on certain attitudinal dimensions changed after the experience of parenthood.
Subjects: 67 former undergraduate psychology students, enrolled at Michigan State University, 1956-1957, who are, for the most part, parents.
Methods: Child-rearing attitude scales administered in 1956-57 and readministered in 1963. Differences between pre-parental and post-parental scores were evaluated for statistical significance.
Findings: After parenthood, subjects became significantly more rejecting and more overprotective toward their children. Occupation influenced changes, with parents engaged in psychologically-oriented professions showing more favorable attitudes than others.
Duration: 1963-1964.
Investigator(s): John R. Hurley, Ph.D., Associate Professor, and Lois Q. Williams, M.A., Department of Psychology, Michigan State University, East Lansing, Mich.
Publication: To be published in either *Journal of Consulting Psychology* or *Child Development*.

18-V-5 CHILD TRAINING AND MOTIVATIONAL DEVELOPMENT

Purpose: To investigate child training antecedents of the development of motive to achieve and motive to avoid failure; to study manifestation of these motives in classroom behavior of the child with special reference to use of programmed learning materials presented in a self-direction learning situation.
Methods: A distinction is made between training for achievement and training for independence; a curvilinear relationship between age of demands for independence and achievement and strength of achievement motivation is expected with low need for achievement being associated with very early or very late demands. Parents' motives and value orientations, and identification of the child with his parents will also be measured, and influence of these variables on development of achievement related motives investigated.
Investigator(s): Charles Philip Smith, Ph.D., Assistant Professor of Psychology, Princeton University, Princeton, N. J.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-V-6 PATTERNS OF MATERNAL CHILD-REARING CONTROL AND SUBSEQUENT EFFECTS OF AVERSIVE SOCIAL REINFORCEMENTS UPON COGNITIVE PERFORMANCE OF MALE OFFSPRING

Purpose: To investigate whether combined ratings of maternal control and nurturance would be predictive of concept formation performance under conditions of mild failure and including negative social reinforcement.
Subjects: 63 college undergraduate males.
Methods: Psychometric ratings of maternal child-rearing control and nurturance were obtained under group conditions. Subjects, recalled individually, were given the Wisconsin Card Sorting Test by a female examiner similar in age to their actual mothers. Card decks of increased difficulty were used to elicit greater failure experiences, and the technique involved examiner's emitting the negative reinforcer "wrong".
Findings: As predicted, the low control-high nurturant mother group (highest mediated self-esteem) performed better than the high control-low nurturant mother group (lowest mediated self-esteem). The high control-high nurturant and low control-low nurturant groups were intermediate in performance.
Duration: October 1963-February 1964.
Investigator(s): Alfred B. Heilbrun, Jr., Ph.D., Visiting Associate Professor

of Psychology, and Helen K. Orr, B.A., University of California, Berkeley 4, Calif.
Publication: Submitted to Journal of Abnormal Psychology.

18-V-7 CHILD REARING AND BEHAVIOR PROBLEMS OF PRESCHOOL CHILDREN IN CALIFORNIA

Purpose: To provide normative data on child-rearing practices and preschool behavior problems; to explore relationship between child-rearing practices and behavior problems in preschool children.
Subjects: Two stratified cluster samples of preschool children's families: 809 families covering the State of California; 812 covering the metropolitan county of Contra Costa.
Methods: Household interviews with mothers; comparative use of findings in both samples; cluster analysis of child-rearing and behavior variables.
Findings: Preliminary findings point up critical influence of mother's education on child-rearing practices and effect of type and frequency of punishment on behavior.
Duration: 1962-1964.
Investigator(s): Martin I. Heinstein, Ph.D., Research Psychologist, Bureau of Maternal and Child Health, California State Department of Public Health, Berkeley 4, Calif.
Cooperating group(s): Bureau of the Census, U. S. Department of Commerce; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-V-8 THE MATRIARCHAL HOME: A DILEMMA OF FOSTER HOME CARE

Purpose: To determine whether Negro foster homes studied are matriarchal. If homes are matriarchal, to determine whether the mother treats boys differently from girls. To determine whether there is a significant difference in manner and success of adjustment between the two sexes.
Subjects: 34 foster mothers; 34 Negro boys and 34 Negro girls, 7.6 years to 13.6 years, in long-term care, in the present foster home 2 years or more, and taken from population of the Division of Foster Home Care, New York City Department of Welfare.
Methods: For children, test battery was administered consisting of WISC, Draw-A-Man, Draw-A-Family, and Rorschach; for mothers, family drawing, questionnaire, and Rorschach were used. Statistics were based on "t" test for I.Q. and Chi-square for other material. Findings of boys versus girls were compared; preferences of mothers concerning sex of child were compared; statistical treatment noted possible correlations between mother's pattern and child's adjustment.
Findings: (1) In WISC girls were significantly higher in digit span (1 percent level) and coding (7 percent level). No other significant differences in verbal, performance, full scale I.Q., or nine other subtests; no significant difference in scatter. (2) No significant difference in location, determinants, or content in children's Rorschach or drawing; children's dynamics similar. (3) Mother's Rorschach results, using most acceptable "norms", suggest substantial pathology. Mother's preference for girl children significant well beyond 1 percent level. No correlation between mother's Rorschach and children's patterns of functioning.
Duration: September 1962-November 1964.
Investigator(s): Janet Nisselson (Ph.D. Candidate, Graduate School of Education, Yeshiva University), Psychologist, Division of Foster Home Care, New York City Department of Welfare, New York, N. Y.

18-V-9 TEACHING PARENTS PSYCHOLOGICAL PRINCIPLES FOR CHILD REARING

Purpose: To teach parents psychological principles (e.g., reinforcement, extinction, etc.) so that these particular concepts can be of use to parents in understanding and in modifying their children's behavior.
Subjects: Parent groups from elementary schools, mental health clinics, and a day school.
Methods: Lecture method is used in which experimenter lectures to parents for ten one-hour sessions. First four sessions focus on teaching particular principles and defining terms. Second group of sessions is to consist of presentation of studies in which these principles have been used to modify behavior of children. In last group of sessions parents present particular problems that concern them; the group, under guidance of experimenter, helps parent work on problem, using techniques discussed earlier. Effect of method will be evaluated in several ways, the two major ones being use of the Maryland Parent Attitude Survey administered before and after the sessions, and use of a questionnaire at end of sessions to determine parents' feelings toward value of sessions and instances in which they have been able to use techniques discussed.
Duration: February-September 1964.
Investigator(s): Donald K. Pumroy, Ph.D., Associate Professor of Psychology, University of Maryland, College Park, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

SOCIAL, ECONOMIC, AND CULTURAL INFLUENCES

18-W-1 AN ANALYSIS OF THE CROSS-CULTURAL STUDY OF CHILDREN'S SOCIAL BEHAVIOR

Purpose: To determine the extent and nature of cross-cultural dimensions of social behavior of children; to discover the cross-cultural relations existing between mothers' self-reports of their child-training practices and observed social behavior of their children.
Subjects: 134 children in 6 different societies selected from United States, Mexico, India, Philippines, Okinawa, and Africa.
Methods: Behavior of subjects observed, recorded, coded by field teams, and prepared for computer analysis. Mothers of subjects interviewed with regard to family life and child-training practices; data from these interviews were independently analyzed. By means of factor analysis and other statistical techniques, social behavior of children (e.g., dominance, nurturance, responsibility) will be internally analyzed and then related to variables in mother interviews (e.g., responsibility training, mother affect).
Duration: January 1963-December 1964.
Investigator(s): Richard Longabaugh, Assistant Professor of Psychology and Sociology, William Lambert, Ph.D., Professor of Psychology, Sociology, and Anthropology, Cornell University, Ithaca, N. Y.; Allen Ellis, Ph.D., IBM Postdoctoral Research Fellow, Graduate School of Education, Harvard University, Cambridge, Mass.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

18-W-2 A CROSS-CULTURAL STUDY OF ADOLESCENT SOCIETIES

Purpose: To compare the bases for formation and maintenance of "adolescent societies" under differing cultural conditions. Principal objective is to test several hypotheses derived from theoretical concepts and empirical findings on American "adolescent societies" and analyses of the Danish culture.
Methods: Danish adolescent subcultures will be described in detail and systematically compared to various adolescent societies in the United States. Implications of these comparisons for secondary education in both countries will be discussed. Special care will be given to selecting Danish samples which represent true counterparts to the American samples, adapting Coleman's techniques so that observed differences between adolescent subcultures can be attributed to real differences in the relative impacts of cultural conditions rather than differences in meanings of words used in the assessment instruments, and collecting additional background data on American samples to facilitate the derivation of explanations of cross-cultural differences. In addition to Coleman's samples, a number of American high schools which require qualifying examinations will be included in order to control for this selective factor in comparing the adolescent subcultures. Statistical comparisons will be made to test hypotheses which predict several dimensions of difference between adolescent societies in America and Denmark.
Duration: October 1963-October 1966.
Investigator(s): Gerald S. Lesser, Ph.D., Director, Laboratory of Human Development, Harvard University, Cambridge 38, Mass.
Cooperating group(s): Cooperative Research Branch, Office of Education, U. S. Department of Health, Education, and Welfare.

18-W-3 A COMPARATIVE STUDY OF CHILDREN'S ALLOWANCES IN CANADA, GREAT BRITAIN, THE SOVIET UNION, AND FRANCE

Purpose: To analyze the social impact of children's allowances on the welfare of children.

Methods: Library research and field studies in the four countries involved.

Duration: Summer 1964-summer 1966.

Investigator(s): Bernice Madison, Ph.D., Chairman, Department of Social Welfare, San Francisco State College, San Francisco, Calif.

18-W-4 CROSS-CULTURAL STUDY OF SOCIAL CONTROL

Purpose: To study cultural differences in sensitivity to social approval and disapproval as techniques of social control of behavior, with particular reference to child-rearing antecedents.

Subjects: Elementary and high school students in Florida and Caribbean and Latin American islands.

Methods: Special assessment of incentive value of social approval and disapproval; retrospective report of perceived parental attitudes; some direct assessment of parental attitudes and practices.

Duration: June 1964-December 1965.

Investigator(s): John W. McDavid, Ph.D., Associate Professor of Psychology, University of Miami, Coral Gables, Fla.

Publication: To be submitted for publication.

18-W-5 DEVELOPMENT OF CONCEPTS OF WOMEN'S ROLE: A JAPANESE-AMERICAN SAMPLE IN HAWAII

Purpose: To understand the perceptions of male and female roles held by children at different developmental levels and in varying cultural milieus.

Subjects: Elementary school girls, 8 to 11 years old, of Japanese ancestry.

Methods: Structured interviews and recording of reactions to drawings and photographs depicting role situations of both men and women.

Duration: Summer 1964-summer 1965.

Investigator(s): Hazel V. Kraemer, Ph.D., Professor of Child Development and Family Study, University of Hawaii, Honolulu, Hawaii.

Cooperating group(s): Faculty Research Fund, University of Hawaii.

Publication: To be submitted for publication.

18-W-6 QUANTITATIVE AND QUALITATIVE COMPARISON OF JAPANESE AND AMERICAN FIGURE DRAWINGS

Purpose: An empirical study and attempt to designate some of the reasons for differences that may appear in the two sets of drawings.

Subjects: Sample of Japanese children, 8 to 12 years of age, in a special class; sample of American children of same chronological ages taken from an institution for the mentally retarded and a public school special class.

Methods: Correlations will be run on I.Q.'s and M.A.'s as obtained on the Draw-a-Person and other standard measures of intelligence (Stanford-Binet) by both groups of subjects. A qualitative analysis will be made to determine possible cultural differences in drawings.

Duration: June-August 1964.

Investigator(s): Ivan Z. Holowinsky, Ed.D., Chief Clinical Psychologist, and Mall Vahar, M.A., Psychologist, Training School, Vineland, N. J.; and Naohiko Fukada, Assistant Professor of Psychology, Doshisha Women's College, Japan.

Publication: To be published in August issue of Training School Bulletin, Vineland, N. J.

18-W-7 CULTURAL DEPRIVATION IN A PAIUTE INDIAN POPULATION

Purpose: To investigate whether cultural deprivation inhibits success in school.
Subjects: 100 Paiute Indian children.
Methods: Longitudinal observations including pediatric, neurological, psychological, and sociological factors.
Duration: July 1963-1968.
Investigator(s): Richard Koch, M.D., Director, Child Development Clinic; Karol Fishler, Ph.D., Chief Clinical Psychologist; and Gayle Goldschmidt, ACSW, Children's Hospital, Los Angeles, Calif.

18-W-8 PATTERNS OF PERCEPTUAL AND LANGUAGE FUNCTIONING IN CHILDREN WITH COGNITIVE DEFICIT

Purpose: To compare patterns of functioning in the two broad areas of perceptual and language functioning; to relate these patterns to social background and experiential variables.
Subjects: Approximately 70 first grade children from slum environments. Half the children will have been through a planned preschool enrichment program; half will not.
Methods: The Illinois Test of Psycholinguistic Ability, plus two Institute-developed language tests for the linguistic area; a revised form of a very extensive visual, auditory, and tactile perceptual test battery devised at the Institute; socio-economic status measures (the Institute SES index); several concept-formation measures, such as those devised by Kendler and by Osler.
Duration: June 1964-May 1967.
Investigator(s): Cynthia P. Deutsch, Ph.D., Associate Professor and Senior Project Coordinator, Institute for Developmental Studies, Department of Psychiatry, New York Medical College, 106th St. and Fifth Ave., New York, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be published in professional journals upon completion of study.

18-W-9 THE RELATIONSHIP OF CREATIVITY TO SOCIAL CLASS

Purpose: To investigate the relationship between various factors of creativity and the socio-economic position of school age children.
Subjects: Approximately 450 Negro and white middle socio-economic children and approximately 450 Negro and white lower socio-economic children in grade 5 in the Pittsburgh Public Schools.
Methods: Socio-economic circumstances of all subjects will be evaluated, using the Index of Status Characteristics. Scores from eight test evaluating factors of creativity will be compared between subjects from various socio-economic situations. I.Q. and achievement will be controlled.
Duration: November 1963-July 1965.
Investigator(s): Robert M. Smith, Ed.D., Assistant Professor, Department of Special Education and Rehabilitation, University of Pittsburgh, Pittsburgh, Pa. 15213.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles of final report.

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18-W-10 EDUCATIONAL STATUS AND SOCIOECONOMIC CHARACTERISTICS OF FARM AND NONFARM YOUTH IN THE UNITED STATES, 1960

Purpose: To describe variations in school dropout rates and school retardation rates among farm and nonfarm youths; to analyze social and economic characteristics associated with the variations.
Subjects: Persons 16 to 24 years old in the United States.
Methods: Application of standard statistical techniques to data contained in the Subject Reports of the U. S. Census of Population, 1960.
Findings: Preliminary data show substantial differences in measures of educational statistics associated with residence, color, ethnic background, income, and education of the young person's family.
Duration: April 1964-August 1965.
Investigator(s): James D. Cowhig, Ph.D., Head, Levels of Living Section, Farm Population Branch, U. S. Department of Agriculture, Washington, D. C.
Publication: Results probably will be published in an Agricultural Economic Report by the U. S. Department of Agriculture.

18-W-11 A STUDY OF ISOLATED FAMILIES AND COMMUNITIES

Purpose: To specify some psychological and sociological consequences of geographical isolation.
Subjects: Residents of three different Norwegian localities which were selected on basis of: (1) occurrence of families and homesteads without immediate neighbors; and (2) location in communities far removed from cities or densely populated rural regions. In one community, Lappish-speaking minority group was singled out for specific analysis.
Methods: Consequences of the two types of isolation on personality formation of children are studied by variety of tests. Results are compared to results obtained on matched samples of children in city and in nonisolated community. By sociological methods, interviewing, and participant observation, an attempt is made to determine most significant interaction patterns within isolated communities and across borders to "central society."
Duration: May 1961-May 1966.
Investigator(s): Vilhelm Aubert, Ph.D., Professor, and staff, Institute for Social Research, Fuglehauggt. 6, Oslo, Norway.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-W-12 A QUANTITATIVE STUDY OF ENVIRONMENTAL CHANGE OVER A DECADE WITHIN AN AMERICAN AND AN ENGLISH TOWN

Purpose: To study how the environment which a community imposes upon its inhabitants changes over time; specifically, to discover nature and measure extent of change over the period 1954-1955 to 1963-1964 in the public (nonfamily) environments which the towns of Midwest, Kansas and Yoredale, Yorkshire provided for their inhabitants. Baseline data are provided by research carried out in Midwest and Yoredale in 1954-1955 in connection with a cross-cultural study of the community environments of children of the two towns (Bulletin 9, Research Relating to Children). In the earlier study, it was found that American children and adolescents at all ages entered more of their town's settings and were less segregated from people of all ages than were English children.
Methods: Identical field procedures to replicate original study will be used. Environmental change over the decade will be measured in terms of births and deaths in behavior settings, changes in attributes of the continuing behavior settings of the towns, and changes in the occupancy of settings with designated attributes. For 47 environmental attributes, such questions will be raised as:

"Has the number of behavior settings of Midwest and Yoredale in which formal education is prominent increased or decreased in the decade?" "Has the change occurred equally for inhabitants of all ages, sexes, and social classes?"
Duration: June 1963-August 1965.
Investigator(s): Roger G. Barker, Ph.D., Professor of Psychology, University of Kansas Midwest Field Station, Oskaloosa, Kans., and Phil Schoggen, Ph.D., Associate Professor of Psychology, University of Oregon, Eugene, Oreg. (Reported by Louise S. Barker, Research Associate, University of Kansas Midwest Field Station.)
Publication: Chapters 7 and 8, The Stream of Behavior; probably book form in 1966.

18-W-13 SOCIAL IMPACT STUDY OF URBAN RENEWAL

Purpose: To examine various facets of impact of urban renewal programs in urban life and life styles of Negro poor in relation to possible helping programs, including school-community relations in a poor Negro neighborhood, impact of relocation on children, limits of cultural heterogenity in schools, and unemployed Negro youth.
Methods: Survey research; school observation and interviews with school personnel; use of school records; participant observation in poor Negro neighborhoods.
Duration: January 1964-February 1965.
Investigator(s): Charles Lebeaux, Ph.D., Professor, School of Social Work, and Eleanor P. Wolfe, Ph.D., Associate Professor of Sociology and Anthropology, Wayne State University, Detroit, Mich.
Cooperating group(s): City of Detroit.
Publication: Initial report to City of Detroit, February 1965; further report, April 1965.

18-W-14 EDUCATIONAL BARRIERS TO ECONOMIC SECURITY IN LARGE CITIES

Purpose: To identify the extent, distribution, and social and economic correlates of premature withdrawal from high school and adult functional illiteracy.
Subjects: High school population, 14 to 19 years, and adult population, 25 years and older, in 131 of the largest cities in the United States.
Methods: Correlation and regression analysis.
Duration: September 1963-August 1964.
Investigator(s): Robert A. Dentler, Ph.D., Executive Officer, and Mary Ellen Warshauer, M.A., Research Assistant, Institute of Urban Studies, Teachers College, Columbia University, New York 27, N. Y.
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be published by Teachers College Bureau of Publications in January or February 1965.

18-W-15 ORIENTATIONS TO WORK AMONG TEENAGERS

Purpose: (1) To describe the cognitions of teenagers regarding nature of work, play, competence, achievement, etc.; (2) to determine social factors related to differences in meanings of these work-orientation components; and (3) to determine which components commonly cluster to form representative work orientations.
Subjects: Over 1200 teenagers varying in age, sex, social class, race, religion, and geographical residence; in addition, a subsample of Puerto

Ricans and institutionalized delinquents.
Methods: Three questionnaire-inventory type instruments employed.
Duration: June 1963-not reported.
Investigator(s): Ronald Lippitt, Ph.D., Professor of Psychology, Institute for Social Research, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Science Foundation.

18-W-16 FACTORS AFFECTING CAREER CHOICES OF ADOLESCENTS: A CROSS-CULTURAL STUDY OF COGNITIVE STRUCTURES USED IN ORGANIZING POSSIBILITIES

Purpose: To obtain knowledge about the varieties of cognitive structures adolescents use in thinking about possibilities and making choices; to obtain evidence on validity of several new assessment techniques potentially useful to counselors.
Methods: Two communities will be selected, one in the Netherlands and one in the United States, matched for size and general occupational characteristics. A questionnaire and group tests will be administered to students in the ninth grade and its Dutch equivalent; a sample of 48 Dutch students and approximately 96 American students, matched for sex, social level, and church status will be selected. Subjects will be interviewed about choices and decisions; individual tests regarding choices, values, and cognitive structures will be administered, and daily activity records will be obtained. By means of statistical procedures, composition of these groups with regard to sociological and cultural variables (sex, social status, religion, and nationality) will be studied and compared with regard to psychological variables obtained in group and individual testing. Procedures used will be evaluated to determine which were best indicators of significant individual styles of valuing and choosing.
Duration: January-December 1964.
Investigator(s): Leona Tyler, Ph.D., and Norman D. Sundberg, Ph.D., Associate Professors of Psychology, University of Oregon, Eugene, Oreg.
Cooperating group(s): Cooperative Research Branch, Office of Education, U. S. Department of Health, Education, and Welfare.

18-W-17 YOUTH EMPLOYMENT SURVEY, CENSUS TRACT 34

Purpose: To gather data on education, delinquency, employment, and mobility of all 16 to 20 year olds living in census tract 34.
Methods: Door-to-door survey undertaken by volunteers.
Findings: One-third of labor force was unemployed; 37 percent of males and 29 percent of females were out of work. Unemployment for Negro females was three times as great as for white females. Nine out of ten would like more help in finding work. Two dropouts were found for every high school graduate within the tract; white dropouts left school at lower grades than did Negro dropouts. Eighty-six percent of dropouts had moved in last five years; forty-eight percent of graduates had moved. Three out of ten youngsters interviewed had police or court records; over half of the male dropouts had records; none of female graduates had records.
Duration: September 1962-October 1963.
Investigator(s): Richard W. Faunce, M.A., and staff, Youth Development Project Washington School, Chicago at 6th St., Minneapolis, Minn. 55415. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1963-1964.)
Cooperating group(s): Northside Youth Development Council; Community Health and Welfare Council of Hennepin County, Inc.; President's Committee on Juvenile Delinquency and Youth Crime.
Publication: Multilith report by Youth Development Project.

18-W-18 UNMARRIED MOTHERHOOD AMONG NEGROES

Purpose: To study attitudes toward illegitimately pregnant Negro girls, their parents, and the staff involved in serving them; to identify different patterns of normative expectations which develop in the Negro community and which appear to lead the young Negro girl into this form of deviant behavior; to examine the influence of variables other than race.
Subjects: Potential populations are available for study through Salvation Army services in Buffalo, Cincinnati, and Cleveland.
Methods: During nine-month period, project director, working with a consultant and staff, obtains detailed description of population served from case records; three questionnaire instruments have been administered in two of institutions for unmarried mothers run by Women's Social Service Department, Eastern Territory of the Salvation Army; three interview schedules are being pretested.
Duration: April 1963-September 1964.
Investigator(s): Hope J. Leichter, Ph.D., Russell Sage Foundation, 505 Park Ave., and Jewish Family Service Inc., 113 W. 57th St., and Deborah Shapiro (D.S.W. Candidate, New York School of Social Work), Research Consultant, Women's Social Service Department, Eastern Territory of The Salvation Army, New York, N. Y.
Cooperating group(s): Research Center, New York School of Social Work, Columbia University; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-W-19 ORIENTATION TO LIFE IN A COMMUNITY OF THE BLIND

Purpose: To focus on specific problem of how children orient themselves to the expectation of loss of sight and how adults continue to work after becoming blind; to accumulate material on systematic perception of culture when one modality (sight) is missing in anthropologist himself. Findings should have wider application to all those conditions, whether somatic or associated with socially deprived environment, where children are reared with narrow expectations of what future must be, as compared with the wider society.
Subjects: Inhabitants of Rincon area, Oaxaca, Mexico, where onchocercosis threatens blindness; infection reaches as high as 90 percent in some areas according to the Department of Health of Mexico.
Investigator(s): Margaret Mead, Ph.D., Associate Curator, Department of Anthropology, American Museum of Natural History, Central Park W. and 79th St., and John Langston Gwaltney, Graduate Student, Columbia University, New York 27, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-W-20 SELECTIVE CRITERIA AND TELEVISION VIEWING BY PUBLIC AND PAROCHIAL SCHOOL CHILDREN

Purpose: To measure attitudes as well as socio-psychological factors as they influence children's television viewing; to reveal children's ideas concerning perception and analysis of these programs.
Subjects: Approximately 5,000 to 10,000 public and parochial school children, 10 to 17 years of age.
Methods: Questionnaires, interviews, and appropriate statistical techniques (correlations and tests of significance) utilized.
Duration: Summer 1964-summer 1966.
Investigator(s): Joseph K. Balogh, Ph.D., Professor of Sociology and Criminology, Bowling Green State University, Bowling Green, Ohio, and Marc Riedel, M.A., Concord College, Athens, W. Va.

18-W-21 FILM EFFECTS ON CHILDREN'S ATTITUDES

Purpose: To gauge effect of selected film in making for change in perceptual field and attitudes toward basic democratic concepts.
Subjects: 85 boys and 68 girls in grades 7 through 9 attending a public junior high school.
Methods: Use of questionnaire and open end space for written-in comments of children prior to viewing film ("Neighbors", Canadian Film Board). Film shown, same form filled again by subjects with three additional questions based on context of film.
Findings: Broader participation on second set of questionnaires, after seeing film. Room for written comments utilized by the children again after seeing film, proving to be a vehicle for an explicit interaction between subjects and researcher. Comments written gave indications of both affective and cognitive states. To statistically ascertain degree of validity in leanings toward a sex and maturational differential present between seventh and ninth grades, it is suggested the study be repeated with larger sample at ninth grade, including an equal distribution of boys and girls. Design seems applicable to basic research at classroom level, providing a framework to gauge interaction both to new experience and to further growth.
Duration: June-July 1964.
Investigator(s): Ann Nowell, Ed.D., Certified Psychologist, P. O. Box 61, Carmel Valley, Calif.
Cooperating group(s): Carmel Unified School District.
Publication: Information available from investigator or Turn Toward Peace, Pacific Central Region, 1730 Grove St., Berkeley 9, Calif.

18-W-22 THE IDEAL FATHER IMAGE HELD BY HOME ECONOMICS TEACHERS COMPARED TO THE IMAGE OF THE FATHER PORTRAYED ON COMMERCIAL TELEVISION'S FAMILY SERIALS

Purpose: To evaluate commercial television for its use in family life education.
Subjects: High school students.
Methods: TV fathers rated on semantic differential.
Findings: Television image of the father is weak, ineffectual, but moral.
Duration: September 1963-July 1964.
Investigator(s): Xenia F. Fane (Ph.D. Candidate), Chairman, Home Economics Department, Prospect Heights High School, Brooklyn, N. Y.

HEALTH SERVICES

18-X-1 DIAGNOSTIC CENTER PROJECT

Purpose: To establish a diagnostic testing center for purpose of evaluating preschool children who are suspected of having a hearing loss or who exhibit a lack of speech and language or delay in speech and language development.
Subjects: Preschool children referred by medical, psychologic, or educational personnel.
Methods: A multi-disciplined approach is to be used in testing; members of testing team will include a clinical psychologist, a speech pathologist, and an audiologist, as well as a pediatric consultant. Routine for each child will be as follows: (1) intake interview with parents, during which time child will be observed in a clinic "playroom"; (2) pediatric examination; (3) audiological evaluation including gross sound tests, play audiometry, speech audiometry, and electro-dermal audiometry, if indicated; (4) speech and language evaluation including speech assessment (phonetic evaluation), oral examination, evaluation of use of symbols (Goldstein-Scheer Form-Color test), and evaluation of auditory, visual, and "inner" language abilities; and (5) psychological evaluation including Vineland Social Maturity Scale, appropriate tests of intellectual capacity (Cattell, Draw-A-Man, Leiter Scale, Stanford-Binet and Grace Arthur), evaluation of visual-motor function, and evaluation of motor performance. If indicated, observation in a semi-structured therapy situation will be undertaken. Therapy or appropriate referrals for further examinations will then be made. The project will be evaluated in two ways, the first involving an enumeration of the number of youngsters referred to the center, the second dealing with reliability and validity of diagnostic procedures. Such an evaluation will be accomplished by follow-up studies of children seen. Also, children residing in immediate area will be enrolled in an evaluative therapy program in speech and hearing clinic. A randomly selected sample will be rescheduled for recheck testing within six months after their initial visit. Factorial analyses will be made of all test data to determine most reliable tests and test items.
Duration: September 1964-August 1966.
Investigator(s): John J. O'Neill, Ph.D., Professor and Director, Speech and Hearing Clinic, and Earl Stark, Ph.D., Assistant Professor, University of Illinois, Champaign, Ill.

18-X-2 THE EFFECTS OF HEALTH EDUCATION AND TUBERCULIN TESTING ON SCHOOL CHILDREN'S BELIEFS ABOUT TUBERCULOSIS

Purpose: To evaluate information and attitudes changed by tuberculosis education and tuberculin testing in the public schools.
Subjects: In pilot study, 510 public school children, grades 5 and 6, in one school district in St. Louis County; in final stage of study, 633 children, grade 6, in another public school district in St. Louis County.
Methods: In pilot study, an instrument was developed containing 84 true-false items to be scored on four variables: accuracy of beliefs about TB, belief in susceptibility of persons to TB, belief in severity of consequences of getting TB, and belief in benefits of taking action to prevent or diagnose TB. Another instrument was developed to enable comparison of beliefs about TB with beliefs about other diseases. In final study, the first measure was administered to four groups: children prior to tuberculin testing who had been taught about TB, children who had neither been taught nor tuberculin tested, children who

had been tuberculin tested but not taught about TB, and children who had had both experiences.
Findings: All three groups who had either been tuberculin tested, taught, or both scored lower on belief in susceptibility and belief in severity than the control group which had had neither experience. Both tuberculin tested groups scored higher on belief in the benefits of protective actions against TB than did the non-tuberculin tested groups. Overall accuracy was greater for the tuberculin tested groups than the control group; other differences were not significant.
Duration: October 1962-August 1964.
Investigator(s): Samuel L. Guskin, Ph.D., Research Project Director, St. Louis County Health Department, Clayton, Mo.
Cooperating group(s): Tuberculosis and Health Society of St. Louis.
Publication: To be submitted to a professional journal.

18-X-3 A STUDY OF PARENTS' REACTIONS TO A HEART SOUND SCREENING PROGRAM FOR CHILDREN

Purpose: To systematically assess parents' reactions to written materials concerning a heart sound screening program as well as their reactions to the program itself.
Subjects: 41 parents living in the Washington, D. C. area who have children in grade school and high school.
Methods: Personal interviews were carried out with each parent using a structured interview schedule as well as a number of open-ended questions.
Findings: A number of communication problems were identified and parents' perceptions and attitudes toward the program were defined. Specific informational needs of parents were described as well as various issues of interest and concern to them, including factors relating to the child's health status, the program's purpose, procedures and results, the parent's role in the program, and general information about heart disease.
Duration: June 1963-June 1964.
Investigator(s): Fred Heinzelmann, Ph.D., Research Psychologist, Behavioral Science Section, Division of Community Health Services, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.
Publication: Mimeographed reports available from the Heart Disease Control Branch, Division of Chronic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C.

18-X-4 SCREENING AUDIOMETRY

Purpose: To determine efficiency of single-frequency testing.
Subjects: Patients in Children's Orthopedic Hospital.
Methods: Pure tone audiometry.
Duration: January-December 1964.
Investigator(s): Clair N. Hanley, Ph.D., Associate Professor of Speech, University of Washington, Seattle, Wash.
Publication: To be published by American Speech and Hearing Association.

18-X-5 THRESHOLD TESTING OF THREE YEAR OLD CHILDREN WITH NORMAL HEARING

Purpose: A follow-up of early infant screening done on three, four, and five month old children formerly seen at the University of Kansas Medical Center as a part of early infant screening.
Subjects: 46 subjects equally divided between sex, predominantly Negro.
Methods: Children are being tested in a puretone by air for 250 cps., 500 cps., 1000 cps., 2000 cps., 4000 cps., and 8000 cps.

Findings: Thus far, children's hearing ranged between -10 db. and 0 db.
Investigator(s): June Miller, Ed.D., Educational Director, Medical Center, University of Kansas, Kansas City, Kans. 66103.

18-X-6 SCHOOL HEALTH SERVICES IN A NORTH CAROLINA COMMUNITY

Purpose: To learn how a school system in a given community sees and carries out its role in the provision of health services.
Subjects: Winston-Salem/Forsyth County consolidated school system.
Methods: Loosely structured interviews with selected, representative members of the school system, health department, and community to get a complete picture of both theoretical and practical aspects of the school health program and how it relates to other health programs in the community.
Duration: May-December 1964.
Investigator(s): Sidney S. Chipman, M.D., M.P.H., Professor and Chairman; Naomi M. Morris, M.D., M.P.H., Assistant Professor; and E. Barbara Stocking, M.P.H., Associate Professor, Department of Maternal and Child Health, School of Public Health, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Community Health Services Division, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-X-7 THE ROLE OF THE PSYCHIATRIST IN THE PUBLIC SCHOOL

Purpose: To evaluate dynamics and techniques of handling school problems in the school when psychotherapy must be brief.
Subjects: Students, parents, teachers, administrators, and guidance and school adjustment personnel.
Methods: Individual, family, and group evaluation and discussion.
Findings: (1) The school community is adaptable; change facilitates education of student. (2) Schools are eager for help. (3) The psychiatrist must go to and work in the school.
Duration: January 1962-indefinite.
Investigator(s): Edward M. Daniels, M.D., Clinical Associate in Psychiatry, Harvard University, Cambridge, Mass.

18-X-8 A SCHOOL MENTAL HEALTH CONSULTATION PROGRAM

Purpose: To develop and demonstrate an efficient method by which local community mental health centers can provide, through consultation with school personnel, a preventive mental health program in the public schools which will effect a reduction in incidence and severity of mental health problems of school children, to develop methods for staff training in consultation techniques; to develop and apply methods for assessment of mental health of the school child; to describe and analyze the procedures for establishing an effective consultant-consultee relationship; and to test various patterns of consultant services to schools.
Investigator(s): Raymond D. Fowler, Jr., Ph.D., Associate Professor, Michael Dinoff, Ph.D., Lecturer, Jerry M. O'Donnell, Ph.D., Associate Professor, and Hally W. Vernon, M.A., Instructor, Department of Psychology, University of Alabama, University, Ala.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-X-9 SYMPTOMS OF PSYCHOLOGICAL PROBLEMS IN SPEECH CLINIC CASES

Purpose: To assess the overlap between child guidance clinic and speech clinic cases; to then consider implications for services and training.
Subjects: Caseload of Speech Clinic of Childrens Hospital of Pittsburgh for one year.
Methods: Data concerning children will be collected; appropriate comparisons with work previously finished will then be made.
Duration: June 1964-June 1965.
Investigator(s): Doris Bradley, Ph.D., Director, Speech Clinic, Children's Hospital of Pittsburgh, H. Lee Wylie, M.D., Medical Director, and Martin R. Gluck, Ph.D., Chief Psychologist, South Hills Child Guidance Center, 300 Mt. Lebanon Blvd., Pittsburgh, Pa. 15234.
Publication: To be submitted to speech and clinical child psychology or psychiatry journals.

18-X-10 LINCOLN HOSPITAL MENTAL HEALTH SERVICES

Purpose: To develop a comprehensive community mental health center and a training facility in community psychiatry. To develop an extensive program of mental health services in the school, including preschool, day care consultation program and K-6 school projects.
Duration: November 1963-not reported.
Investigator(s): Harris B. Peck, M.D., Director, Mental Health Services, Lincoln Hospital and Associate Professor; Meyer Rabban, Ph.D.; and Melvin Roman, Ph.D., Division of Social and Community Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.

18-X-11 CHARACTERISTICS OF SOUTH HILLS CHILD GUIDANCE CENTER'S OVERALL CASELOAD

Purpose: To describe kinds of children being seen in clinic and to consider implications for patterns of service.
Subjects: Total caseload of South Hills Child Guidance Center since reorganization in September 1959.
Methods: Statistical description.
Duration: June-December 1964.
Investigator(s): Martin R. Gluck, Ph.D., Chief Psychologist, and H. Lee Wylie, M.D., Medical Director, South Hills Child Guidance Center, 300 Mt. Lebanon Blvd., Pittsburgh, Pa. 15234.
Publication: Paper to be presented at meetings of professional organizations (e.g., A.A.P.C.C.); to be submitted for publication.

18-X-12 CRISIS-FOCUSED TREATMENT IN A CHILD GUIDANCE CLINIC

Purpose: To investigate the important factors in crisis-focused treatment by categorizing: (1) the objective environmental events which precipitate family stress and subsequent referral to a clinic; (2) the subjective meaning of these events; and (3) the types of therapeutic interventions used to alleviate the stress.
Subjects: Approximately 100 families in treatment at a child guidance clinic.
Methods: A semi-structured interview of each family prior to intake interview, and a follow-up interview. Data will be analyzed to provide descriptive categories for the variables and to reveal relationships among them, such as the well-known pattern of grief reactions associated with death.
Duration: June 1963-November 1966.
Investigator(s): Mary D. Bain, M.D., Psychiatric Director, Beatrice Bloom,

M.S.S.S., ACSW, Chief, Social Service, and Karen Signell, Ph.D., Research Coordinator, Greater Lawrence Guidance Center, Inc., 217 Haverhill St., Lawrence, Mass. 01842.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Tentative plans for publication in American Journal of Orthopsychiatry.

18-X-13 RESEARCH INTO PROCESSES OF FAMILY THERAPY

Purpose: To collect empirical data on the procedure of conjoint family therapy as practiced in the Family Psychiatry Section of the Jewish General Hospital.
Subjects: 20 families selected in order of presentation for psychiatric evaluation and therapy. All families are intact with at least two parents and one child, and are seen in therapy for at least the first session conjointly.
Methods: Questionnaires are completed after initial screening, after second therapy session, after every sixth session for six months, and then after every twelfth session. Questionnaires have been structured to gather material considered pertinent from standpoint of family psychopathology on basis of clinical experience and discussions in research groups and seminars.
Duration: September 1964-1967.
Investigator(s): Nathan B. Epstein, M.D., Associate Professor, McGill University and Psychiatrist-in-Chief, Jewish General Hospital, 3755 Cote St. Catherine Rd., Montreal 26, Que.

18-X-14 FOLLOW-UP OF CHILD PSYCHIATRY DEPARTMENT CASES

Purpose: To establish a clinical facility for teaching and research purposes that will be able to follow-up all patients discharged from the Children's In-Patient Service.
Methods: Subjects to be periodically re-evaluated by a psychiatrist, psychologist, and social work team.
Duration: 1962-indefinite.
Investigator(s): Edward R. Ritvo, M.D., Ward Psychiatrist, Children's Unit, Neuropsychiatric Institute, University of California, Los Angeles 24, Calif.
Cooperating group(s): Departments of Psychology and Social Work, University of California at Los Angeles.

18-X-15 MATERNAL AND CHILD HEALTH RESEARCH PROGRAM

Purpose: To develop a research program in maternal and child health having the following objectives: (1) to study the utilization of prenatal services including the reasons or causes as to why services are not sought or are sought late in pregnancy, and the relation of this to outcome of pregnancy; (2) to evaluate adequacy of maternal and child health service programs in terms of coverage and quality of care, with promptness of attention, frequency and regularity of visits, immunization levels, referral systems and continuity of care serving as indices of such quality.
Duration: July 1964-continuing.
Investigator(s): Luis F. Sanchez Meana, M.D., M.P.H., Associate Professor, Maternal and Child Health Section, Department of Preventive Medicine and Public Health, School of Medicine, University of Puerto Rico, San Juan, P. R.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-16 REGIONAL MATERNAL AND CHILD HEALTH RESEARCH PROGRAM

Purpose: To establish a university-based regional maternal and child health research program, bringing together on a continuing basis a core of research personnel to produce and implement strategy of long-range, well-conceived and substantive studies. Cooperative relationships with appropriate service agencies will be developed. Primary interest will focus on impact of social and community change on health and welfare of families, especially during high risk periods such as conception, pregnancy, perinatal and early childhood. Effect of "change", including technological advances, legislative decisions, population shifts, and cultural differences, will be studied from a number of points of view: as a cause, as a result, and as a way of solving health problems of mothers and children. The geographic region involved includes New York State (especially New York City) and New Jersey, and possible eventual collaborative projects with agencies or universities in contiguous areas.
Duration: July 1964-continuing.
Investigator(s): Elinor F. Downs, M.D., M.P.H., Assistant Professor of Public Health Practice, School of Public Health and Administrative Medicine, Columbia University, New York, N. Y. 10032.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-17 HEALTH AND MEDICAL CARE OF MOTHERS AND CHILDREN IN AN URBAN COMMUNITY

Purpose: To provide periodic information on demographic characteristics, patterns of medical care, and health needs of families, particularly mothers and children, in the Washington Heights area of New York City. The impact of trends, movements and community changes on this known population will be examined as transition takes place.
Methods: Data gathering by personal interview from a probability sample of housewives.
Duration: July 1964-indefinite.
Investigator(s): Elinor F. Downs, M.D., M.P.H., Assistant Professor of Public Health Practice, and Jack Elinson, Ph.D., Director, Community Population Laboratory, and Associate Professor of Administrative Medicine, School of Public Health and Administrative Medicine, Columbia University, New York, N. Y. 10032.
Cooperating group(s): Children's Bureau, Welfare Administrative, U. S. Department of Health, Education, and Welfare.

18-X-18 A PLAN OF COMMUNITY RESEARCH IN MATERNAL AND CHILD HEALTH

Purpose: To undertake studies in the New England area, particularly Boston, dealing with: (1) methods of improving service programs for prevention of risks of complications and adverse outcomes of pregnancy; (2) design and evaluation of community services for prevention of risks of injuries and consequences of neglect in early childhood; (3) requirements for programs directed to health and related problems of adolescents and youth, with special emphasis on low-income, low-education level groups, and with particular focus on implications for future childbearing and child rearing. Reviews of adequacy, availability, and utilization of vital and health records for maternal and child health program studies are planned. Evaluative and experimental studies of maternity care programs are to be developed. Closely related areas of adolescents and youth and care of the young infant will be initially studied in framework of service programs, and through reporting and surveillance procedures to be established.
Duration: July 1964-continuing.
Investigator(s): William M. Schmidt, M.D., Professor and Head, Department of

Maternal and Child Health, and Robert B. Reed, Ph.D., Professor and Head, Department of Biostatistics, School of Public Health, Harvard University, 1 Shattuck St., Boston 15, Mass.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-19 STUDIES OF MATERNITY CARE AND PERINATAL MORTALITY IN THE SOUTHEASTERN REGION OF THE UNITED STATES

Purpose: (1) To undertake two studies focused on consumer conception, utilization, and response to maternity care in North Carolina: one of women delivering without prenatal care, the other of women applying for prenatal and delivery care under free or public programs requiring a means test; further studies of other high-risk groups will be undertaken as methodology develops. (2) To carry out methodological studies in perinatal mortality, continuing research in application of existing statistical models and developing new models for analysis and prediction of pregnancy outcome and fetal survival.
Methods: A preliminary analysis of hospital deliveries in North Carolina and some assessment of how maternity services are made available to women in the State will be made. Data will be collected by structured questionnaires administered by trained interviewers, and will be analyzed to determine relationship of study variables to utilization of maternity care and outcome of pregnancy. Emphasis will be placed on following answers: whether prenatal care itself, characteristics of woman and family, or social milieu which affects her utilization of services appear to be the most important factors in favorable or unfavorable pregnancy experience.
Duration: July 1964-continuing.
Investigator(s): Sidney S. Chipman, M.D., M.P.H., Professor and Chairman, Department of Maternal and Child Health, School of Public Health. University of North Carolina, Chapel Hill, N. C. 27515.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-20 WESTERN REGION MATERNAL AND CHILD HEALTH RESEARCH PROGRAM

Purpose: (1) To establish a regional research program in maternal and child health in cooperation with 12 western states in order to advance knowledge about principal factors related to high maternal, infant, and childhood mortality and morbidity in the area; (2) to determine pattern of utilization of prepaid ambulatory health and medical care services for children for a sample of families covered by Kaiser Foundation Health Plan, Oakland; (3) to study effectiveness of other community programs of prevention and medical care; and (4) to stimulate and assist the states in carrying out experiments and demonstrations of improved approaches to program planning and development based on research findings.
Methods: Demographic studies will be made to identify high risk communities, followed by detailed investigations of roles of poverty, cultural, ethnic, and geographic factors, as well as availability and use made of existing health resources, and situational and motivational barriers to utilization by high risk groups of mothers and children. Staff will initiate, in cooperation with State of Hawaii, a study of perinatal and environmental influences on physical defects and mental retardation in group of children originally followed to age two in the Kauai Pregnancy Study.
Duration: June 1964-continuing.
Investigator(s): Jessie M. Bierman, M.D., M.S.P.H., Research Physician, Fern E. French, Dr.P.H., Associate Research Biostatistician, Helen M. Wallace, M.D., M.P.H., Professor of Maternal and Child Health, School of Public Health, University of California, Berkeley; and Robert L. Nolan, M.D., M.P.H.,

Assistant Director, Department of Pediatrics, Kaiser Foundation Health Plan, Oakland, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-21 THE UNIVERSITY OF MICHIGAN REGION V RESEARCH PROGRAM IN MATERNAL AND CHILD HEALTH AND CRIPPLED CHILDREN'S SERVICES

Purpose: To establish and develop a long-range research program designed to contribute to improvements and innovations in health services for mothers and normal and handicapped children; eventually, to serve as a regional resource and center of research competence. Proposed research tasks include: (1) evaluation of services for handicapped children, including a general review of medical and social functioning of children with a wide variety of handicapping conditions who have received care under a State-wide crippled children's program, examination of the effectiveness of certain specialized services for handicapped children, and re-examination of "natural history" of certain chronic diseases of childhood; (2) investigations in pediatric outpatient services; (3) problems of institutionalization and institutional care for children; and (4) financing children's health services.
Duration: July 1964-continuing.
Investigator(s): Donald C. Smith, M.D., Professor, and Harold A. Decker, M.D., Assistant Professor, Department of Maternal and Child Health, School of Public Health, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-22 A PROGRAM TO INVESTIGATE REPRODUCTIVE WASTAGE (INCLUDING RELATED FORMS OF MENTAL RETARDATION AND NEUROLOGIC DAMAGE) IN A VERY HIGH RISK URBAN INDIGENT POPULATION

Purpose: To build a research program designed to investigate all forms of reproductive wastage in a very high risk urban indigent population in order that reproductive care programs may be redesigned to prevent this high incidence of reproductive wastage.
Methods: Program will begin with clinico-pathologic correlations in abortion, fetal and neonatal death and expand to include nonfatal sequelae of perinatal stress. Patients with a history of previous reproductive wastage will be selected and prospectively studied to learn techniques of applying reproductive research skills to improve patient care. Additional areas of development include sociologic definition of high risk population, application of genetic counseling to reproductive care, continuous audit of congenital malformation occurrence, natural history of reproduction in the mentally retarded mother, and maternal mortality in abortion among the indigent.
Duration: July 1964-continuing.
Investigator(s): Malcolm G. Freeman, M.D., and staff, Department of Gynecology-Obstetrics, School of Medicine, Emory University, Atlanta, Ga. 30303.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-23 A STUDY TO DESCRIBE THE CHARACTERISTICS OF DEATHS ASSOCIATED WITH CHILDBIRTH IN METROPOLITAN NEW ORLEANS AND SUBSEQUENTLY IN THE STATE OF LOUISIANA

Purpose: To undertake an epidemiologic review of stillbirths and of infant and maternal deaths; to identify regions of high prevalence of fetal and infant wastage and to describe the geographic, demographic, and temporal details of

the loss. To identify an area of high annual perinatal mortality in New Orleans and conduct a prospective study of subsequent pregnancies of the mothers. To identify localities having highest rates of stillbirth and infant mortality in State of Louisiana and undertake an epidemiologic and sociologic review of these areas to determine what factors may be responsible for these occurrences.
Methods: Examination of vital records of the State of Louisiana and the parish of Orleans, including medical records, records in health and welfare departments, and in other official and voluntary agencies. Collaboration with Boards of Health of New Orleans and State of Louisiana in program planning for areas of highest rates of stillbirths and infant mortality. Evaluation of effectiveness of these programs at specified intervals.
Duration: July 1964-continuing.
Investigator(s): Robert H. Lennox, M.D., Professor of Child Health, Division of Hygiene and Tropical Medicine, School of Medicine, Tulane University, New Orleans, La. 70112.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-24 SUDDEN UNEXPLAINED DEATH IN INFANTS SYNDROME

Purpose: To establish the epidemiologic background for sudden unexplained death in the State of Washington antecedent to further analysis.
Subjects: Dead infants.
Methods: At present, careful postmortem exams and clinical summaries are being accumulated. Frozen serum and tissues are stored for subsequent analysis. After sufficient experience and accumulation of background information, an investigation into the mechanism of death will be done.
Duration: July 1963-indefinite.
Investigator(s): N. Karle Mottet, M.D., Director of Hospital Pathology and Associate Professor of Pathology, University Hospital, University of Washington, Seattle, Wash.
Cooperating group(s): Washington State Medical Association.

18-X-25 ASSESSMENT OF THE HEALTH STATUS OF MOTHERS AND CHILDREN AND THE AVAILABILITY AND UTILIZATION OF HEALTH FACILITIES IN A SELECTED SAMPLE OF HIGH-RISK COMMUNITIES

Purpose: To provide nationwide comparative data on both urban and rural areas of high risk for maternal and child health and welfare.
Subjects: Mothers and children.
Methods: Analysis of census data and special tabulations; selection of a sub-set of rural and urban high-risk areas for field survey and intensive study; examination of local data as to availability and utilization of services pertinent to maternal and child health.
Duration: June 1964-May 1967.
Investigator(s): Robert B. Reed, Ph.D., Chairman, Department of Biostatistics, and Lenin A. Baler, Ph.D., S.D. Hyg., Assistant Professor of Psychology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-26 MEDICAL CARE OF INFANTS AND PRESCHOOL CHILDREN

Purpose: (1) To determine amount and kind of medical care now actually being received by infants and preschool children; (2) to describe the barriers to

fuller use of facilities that are at present available; and (3) to provide a rational basis for suggesting changes in the structure and organization for providing their medical care.
Subjects: Mothers of infants and preschool children.
Methods: Repeated interviews with mothers of a cohort of newborn infants and mothers of a randomly selected sample of preschool children. Interviews will be conducted monthly for one year for infants, and bimonthly for one year for preschool children. Appropriate control groups will be interviewed once only at intervals during the year to assess effect of repeated interviewing.
Duration: January 1964-1968.
Investigator(s): Rowland L. Mindlin, M.D., Acting Director, Bureau of Child Health, and Paul M. Densen, Sc.D., Deputy Commissioner, New York City Department of Health, New York, N. Y.
Cooperating group(s): Albert Einstein College of Medicine.
Publication: A series of articles is anticipated.

18-X-27 A STUDY OF FACTORS INFLUENCING THE HEALTH CARE OF INFANTS BORN TO RESIDENTS OF A NORTH CAROLINA COUNTY

Purpose: To learn how, why, and where families of young infants in a specific area of the South do or do not obtain health care for their infants during the first 14 months of life.
Subjects: A cohort sample of infants born to Orange County residents, selected monthly from the birth registrations over a period of one year and followed until approximately 14 months of age.
Methods: By using highly structured questionnaires and trained interviewers, information is obtained from mothers of these infants at specified intervals. Questions are designed to obtain information on family characteristics and family's level of health awareness, their satisfaction or dissatisfaction with health care, and availability to them of health resources. Health records of the infants will be checked at the end of the family data collection.
Duration: July 1963-July 1966.
Investigator(s): Ann DeHuff Peters, M.D., Associate Professor of Maternal and Child Health, and Sidney S. Chipman, M.D., Professor and Chairman, Department of Maternal and Child Health, School of Public Health, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): North Carolina State Board of Health.

18-X-28 DETERRENTS TO CHILD HEALTH SUPERVISION

Purpose: To determine whether family circumstances or other factors play a role in influencing scheduled attendance at a pediatric comprehensive health clinic.
Subjects: Infants born at North Carolina Memorial Hospital, qualifying for comprehensive health care in the pediatric clinics and given appointments for such follow-up care.
Methods: Infants were studied by chart review to obtain a record of first nine-months of attendance in clinic. Mothers of these infants (N=246) were visited at home and were interviewed when infant was approximately ten months of age; a structured questionnaire designed to give information about family's awareness of health resources, child health knowledge, attitudes toward health personnel, social alienation, and other factors which might influence their attendance at clinic was employed.
Duration: January 1963-September 1964.
Investigator(s): Naomi M. Morris, M.D., M.P.H., Assistant Professor; Martha H. Hatch, B.S., Research Associate; and Sidney S. Chipman, M.D., M.P.H., Professor and Chairman, Department of Maternal and Child Health, School of Public Health, University of North Carolina, Chapel Hill, N. C.

Cooperating group(s): North Carolina Memorial Hospital, University of North Carolina.
Publication: Paper presented at Maternal and Child Health Session at Annual Meeting of the American Public Health Association, New York City, October 1964.

18-X-29 SOCIAL FACTORS AND PARTICIPATION IN FOLLOW-UP CARE OF CHOREA

Purpose: To describe a group of chorea patients; to evaluate their participation in a program of follow-up care; to determine whether certain medical and social factors are associated with cooperation in follow-up care.
Subjects: 132 patients at La Rabida Jackson Park Sanitarium, with a diagnosis of encephalitis rheumaticum, who were placed in Home Service (follow-up) program from its inception in 1950 until December 1959.
Methods: Analysis of medical and social service records. Cases were assigned to criterion groups on basis of quality of cooperation.
Findings: Thus far, all but 19 continued to return for follow-up care over four years or more; of these, 11 withdrew for "acceptable" reasons such as moving from state. Of those who continued 96 percent made 10 or more return visits. Various social factors show associations with quality of participation.
Duration: October 1963-indefinite.
Investigator(s): Mary E. Macdonald, Ph.D., Professor, School of Social Service Administration, University of Chicago, Burton J. Grossman, M.D., Medical Director, and Katherine L. Hagberg, A.M., Director of Social Service, La Rabida Jackson Park Sanitarium, 65th St. and South Shore Dr., Chicago 49, Ill.
Publication: Two or more papers are planned.

18-X-30 HOSPITAL INPATIENT UTILIZATION BY AGE, SEX, DIAGNOSIS, AND TYPE OF BLUE CROSS AGREEMENT

Purpose: To determine type and extent of overall hospital (inpatient) utilization and differences in hospital utilization for various membership groups (agreements); to establish basis for similar comparative studies.
Subjects: Blue Cross of Western Pennsylvania enrollees for 1963 who were under 18 years of age.
Methods: Analysis of hospital claim forms submitted from approximately 100 member hospitals.
Duration: June-December 1964.
Investigator(s): Bernard Ferber, M.S., Assistant Director for Research, Blue Cross of Western Pennsylvania, One Smithfield St., Pittsburgh, Pa. 15222.
Publication: To be submitted to Blue Cross Association, Chicago, Ill.

18-X-31 DAY TREATMENT PROGRAM FOR HOSPITALIZED YOUNG PATIENTS

Purpose: To test effectiveness of a program which provides the maximum service possible for hospitalized children and adolescents within the present resources at St. Elizabeths Hospital.
Subjects: Inpatients at St. Elizabeths Hospital.
Methods: Comparison of patients who are participants in Day Treatment Program with matched cases who are not.
Duration: June 1964-June 1967.
Investigator(s): Dale C. Cameron, M.D., Superintendent, and Goldie Cohen, M.A., Coordinator, Youth Program, St. Elizabeths Hospital, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20032.
Publication: Results will be available from St. Elizabeths Hospital upon completion of the study.

18-X-32 UTILIZATION OF PROFESSIONAL PERSONNEL IN NEW YORK CITY SCHOOL HEALTH SERVICE

Purpose: To develop a school health team that will employ an optimum percentage of professional time for professional purposes; to develop methodology for studying public health personnel utilization patterns.
Subjects: Activities of Health Department doctors, nurses and public health assistants in the school health program will be studied.
Methods: Study will be conducted in three phases: phase I will be a utilization study of present system. A work diary method will be employed to arrive at baseline data. Phase II will be an analysis of baseline data and experimentation with restructured staffing patterns. Phase III will be an appraisal of the restructured patterns.
Duration: April 1964-November 1966.
Investigator(s): Lester J. Rosner, M.A., Assistant Commissioner for Administrative Services; Robert W. Culbert, M.D., Director, Bureau of School Health Services; and Grace McFadden, M.A., M.P.H., Director of Public Health Nursing, New York City Department of Health, New York 13, N. Y.
Cooperating group(s): New York City Board of Education.
Publication: Report will be available from New York City Health Department.

18-X-33 JOINT STUDY ON PEDIATRIC RESEARCH, EDUCATION, AND PRACTICE

Purpose: To gather information on various aspects of pediatric practice and health services to children; to study relation of pediatric teaching and research to changing problems of child health.
Methods: Questionnaire surveys of pediatricians and chairmen of pediatric departments; compilation of information available from other health organizations and surveys.
Duration: May 1962-June 1965.
Investigator(s): Robert E. Cooke, M.D., Chairman, Department of Pediatrics, School of Medicine, Johns Hopkins University, Baltimore 5, Md.; Donald A. Cornely, M.D., Associate Research Professor of Maternal and Child Health, School of Public Health, University of Pittsburgh, Pittsburgh, Pa; and E. H. Christopherson, M.D., Executive Director, American Academy of Pediatrics, 1801 Hinman Ave., Evanston, Ill. 60204 (Reported by Robert G. Frazier, M.D., Secretary, American Academy of Pediatrics.)
Cooperating group(s): American Pediatric Society; American Board of Pediatrics; Section of Pediatrics, American Medical Association; Society for Pediatric Research.

18-X-34 BRIDGING GAPS IN DOCTOR-PATIENT COMMUNICATION

Purpose: To determine some gaps in communication between physician and patient or parent; to develop methods for bridging these gaps.
Subjects: Parents of patients visiting various outpatient departments and well-baby clinics.
Methods: Using brief interview schedules to explore patients' expectations from physician and clinic, and their ideas about the illness and treatment, etc.
Findings: Preliminary findings would suggest that if patients' expectations and patients' own ideas concerning illness and treatment are taken into account, more effective communication between physician and parents will take place, and medical advice will be more likely to be followed.
Duration: October 1964-October 1967.
Investigator(s): Barbara Korsch, M.D., Associate Professor of Pediatrics, School of Medicine, University of Southern California, Los Angeles 7, Calif.
Cooperating group(s): Children's Hospital of Los Angeles; Cedars of Lebanon Hospital; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-X-35 APPLICATION OF CEPHALOMETRIC ROENTGENOGRAPHY TO PEDODONTICS RESEARCH

Purpose: To develop a program of cephalometric roentgenography for the evaluation of therapeutic and preventive measures now employed in pedodontics and supportive to training of pedodontists; to evaluate and measure the effects of static and corrective orthodontic technics now employed in Children's Dentistry.
Subjects: Normal patient load available in Department of Pedodontics at College of Dentistry, constituting children, ages 3 to 15, actively being seen for dental care.
Methods: In addition to routine dental examination and records, oriental lateral cephalometric films, frontal cephalometric films, and oriented oblique cephalometric films are obtained. Dental casts are also obtained at regular intervals. Cephalometric analysis will be made on each child using standard tracing and measuring techniques as well as other analysis specifically developed for these demonstrations. Related measurements of dentition will be made from dental casts.
Duration: September 1959-continuing.
Investigator(s): Thomas K. Barber, D.D.S., M.S., Professor of Dentistry, and Samuel Pruzansky, D.D.S., M.S., Professor of Pedodontics, College of Dentistry, University of Illinois, Chicago, Ill.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be published as each subject studied is completed. A few papers relative to comparative studies in tooth eruption and effects of anterior crossbite have been published.

18-X-36 DENTAL THROAT CULTURE STUDY

Purpose: To include the dentist in a more active role in the primary prevention of rheumatic fever and its sequelae; to postpone oral surgery when culture is positive until a 10-day treatment period is completed; and to show that this can be a simple procedure adaptable to dental practice.
Subjects: Children, 5 to 15 years of age.
Methods: (1) Use of Stickney Township Dental Clinics; and (2) use of questionnaire to determine whether child needs a throat culture.
Findings: Thus far, approximately 25 percent of children on whom throat cultures were taken were positive for Group A streptococci.
Duration: April 1964-April 1967.
Investigator(s): Gene J. Franchi, D.D.S., M.P.H., Dental Director and Acting Health Officer, and staff, Stickney Public Health District, Oaklawn, Ill.
Cooperating group(s): Illinois State Department of Public Health; National Heart Institute, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: First year results to be available in 1965.

18-X-37 MEDICAL DEPENDENCY AND DENTAL CONDITION

Purpose: Findings from an earlier phase of this dental research program suggest that, over and above economic status, some families receive health care primarily through organized community programs (Bulletin 12, Research Relating to Children). Present study will determine whether the dental condition of teenagers is associated with an earlier pattern of receiving free care in a public health dental clinic by the teenagers themselves or by their younger siblings.
Subjects: A cohort of 850 lower income families in which there is a teenage child.
Methods: Dental examinations, including bitewing X-rays, have been conducted

on the teenagers, and various ratings of dental condition have been constructed. Information has been collected in structured interviews with mothers on general style of life variables, with particular emphasis on respondents' roles in initiating and maintaining family pattern of health care.
Duration: January 1963-December 1965.
Investigator(s): Camille Lambert, Jr., Ph.D., Assistant Professor of Social Research, Howard E. Freeman, Ph.D., Associate Professor, and Robert Morris, D.S.W., Professor, Florence Heller School for Advanced Studies in Social Welfare, Brandeis University, Waltham 54; Leon J. Taubenhaus, M.D., M.P.H., Assistant Director, Boston City Hospital, Boston; and Edward C. Maloof, D.D.S., M.P.H., Director, Brookline Dental Clinic, Brookline, Mass.
Cooperating group(s): Brookline Department of Health; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Several papers to be developed for submission to professional journals upon completion of project.

18-X-38 OPTIMUM PRENATAL-POSTNATAL FLOURIDE FOR DEVELOPMENT OF DECIDUOUS AND PERMANENT TEETH

Purpose: To determine from clinical examination optimum prenatal-postnatal flouride for development of caries-resistant deciduous and permanent teeth.
Subjects: 300 children from kindergarten and grades 1 and 2--lifelong residents of communities with 0.0, 1.0, or 4.0 p.p.m. flouride in the water.
Methods: Dental examinations.
Duration: April 1963-indefinite.
Investigator(s): Charles W. Gish, D.D.S., M.S.D., Director, Division of Dental Health, Indiana State Board of Health, Indianapolis, Ind.
Publication: To be submitted for publication in 1964.

18-X-39 THE EFFECT OF SCHOOL WATER FLUORIDATION ON DENTAL CARIES IN PIKE COUNTY, KENTUCKY AND ELK LAKE, PENNSYLVANIA

Purpose: To determine the reductions in dental caries activity which can be attained by the addition of fluorides to water consumed by children while attending school in an area where communal water supplies are fluoride-deficient.
Subjects: Students attending the Elk Lake School in Dimock, Pa. and the Feds Creek and Phelps Schools in Pike County, Ky.; all these schools contain grades 1 through 12.
Methods: At Elk Lake School, fluoride level of school's water supply has been maintained at five parts per million since 1958. Fluoride levels at the two schools in Kentucky have been adjusted to 3 ppm since 1957. All children in these schools were examined prior to initiating fluoridation. Periodically, children are re-examined and findings compared with baseline data to determine interim results.
Duration: Kentucky: 1957-1968; Pennsylvania: 1958-1969.
Investigator(s): Herschel S. Horowitz, D.D.S., M.P.H., Chief, Research and Development Section, and Frank E. Law, D.D.S., M.P.H., Former Chief (retired), Disease Control Branch, Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare, 8120 Woodmont Ave., Bethesda, Md.
Cooperating group(s): Kentucky State Department of Health; Pennsylvania State Department of Health; Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results obtained after five years' investigation in Kentucky and four years in Pennsylvania are currently being prepared for an interim report.

18-X-40 A STUDY OF THE PRENATAL EFFECTS OF CONTROLLED FLUORIDATION ON DECIDUOUS TEETH

Purpose: To determine the benefits, if any, to the deciduous teeth of seven year old children who have ingested optimally fluoridated water during the period of embryonic growth and development.
Subjects: Approximately 3000 school children in Minneapolis, Minnesota, enrolled in grades 1 and 2, who have the proper lengths of prenatal exposure to fluoridated water.
Methods: A series of five dental examinations will be conducted at three month intervals on children aged seven years two months through seven years four months at the time of examination. Group A children have had no prenatal exposure; Group B children were exposed to fluoridated water up to the last three months of the prenatal period; Group C children were exposed to fluoridated water more than the last three months but less than the last six months of the prenatal period; Group D children were exposed to fluoridated water more than the last six months but less than the nine months of the prenatal period; Group E children were exposed to fluoridated water during the full term of pregnancy.
Duration: September 1964-September 1965.
Investigator(s): Herschel S. Horowitz, D.D.S., M.P.H., Chief, and Stanley B. Heifetz, D.D.S., M.P.H., Research and Development Section, Disease Control Branch, Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare, 8120 Woodmont Ave., Bethesda, Md.
Cooperating group(s): Minneapolis Board of Education; Minnesota State Department of Health.
Publication: Paper will be submitted for publication in appropriate professional journal and may be presented at a national dental meeting.

18-X-41 EVALUATION OF A TOPICAL APPLICATION OF STANNOUS FLUORIDE TO TEETH OF CHILDREN RESIDING IN A FLUORIDATED COMMUNITY

Purpose: To determine if a significant additive effect in caries-inhibition results from augmenting water fluoridation with topical application of stannous fluoride.
Subjects: A sample of 1266 Chattanooga, Tennessee school children in grades 2 through 4 who have had maximum exposure to fluoridated water.
Methods: Children divided into three comparable study groups: Group A receives annually a prophylaxis; Group B receives annually a prophylaxis followed by a four-minute topical application of an eight percent stannous fluoride solution; Group C receives annually a prophylaxis followed by a thirty-second topical application of a ten percent stannous fluoride solution. Clinical dental examinations annually; dental caries increment for each group tabulated and evaluated statistically.
Duration: December 1963-December 1965.
Investigator(s): Herschel S. Horowitz, D.D.S., M.P.H., Chief, and Stanley B. Heifetz, D.D.S., M.P.H., Research and Development Section, Disease Control Branch, Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare, 8120 Woodmont Ave., Bethesda, Md.
Cooperating group(s): Tennessee State Department of Public Health.
Publication: Paper will be submitted for publication in appropriate professional journal and may be presented at a national dental meeting.

18-X-42 EVALUATION OF A STANNOUS FLUORIDE PROPHYLAXIS PASTE FOR USE IN DENTAL PUBLIC HEALTH PROGRAMS

Purpose: To determine the efficacy of a stannous fluoride prophylaxis paste

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in controlling dental caries when the paste is employed: (1) as an independent agent; and (2) when followed by a single topical application of an eight percent stannous fluoride solution.
Subjects: A sample of 1157 school children in Asheville, North Carolina enrolled in grades 3 through 5.
Methods: Children divided into four comparable study groups. Group A annually receives a regular prophylaxis; Group B annually receives a prophylaxis using a stannous fluoride prophylaxis paste; Group C annually receives a regular prophylaxis followed by a topical application of an eight percent stannous fluoride solution; Group D receives a prophylaxis using a stannous fluoride paste, followed by a topical application of an eight percent fluoride solution. Clinical dental examinations conducted annually. Dental caries increment for each group tabulated and evaluated statistically.
Duration: February 1963-February 1965.
Investigator(s): Herschel S. Horowitz, D.D.S., M.P.H., Chief, Research and Development Section, Disease Control Branch, Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare, 8120 Woodmont Ave., Bethesda, Md.
Cooperating group(s): North Carolina State Board of Health.
Publication: Paper will be submitted for publication in appropriate professional journal and may be presented at a national dental meeting.

18-X-43 STUDY TO DETECT ANTI-CARIOGENIC EFFECT OF A STANNOUS FLUORIDE PROPHYLACTIC PASTE

Purpose: To determine if cleaning the teeth professionally with a prophylactic paste containing stannous fluoride is effective in reducing incidence of dental caries and, if so, how effective.
Subjects: Approximately 975 white school children, 7 to 13 years of age.
Methods: Dental examinations (DMFT and DMFS); selection of three equal groups according to age, sex and dental caries experience, and treatments as follows: (1) to receive a dental cleansing by a dental hygienist using a fluoride prophylactic paste; (2) to receive a dental cleansing by a dental hygienist using a prophylactic paste without fluoride; and (3) to receive no dental cleaning (examinations only). Examinations and treatments will be repeated at the end of one year and final examinations will be made two years after initial treatments.
Duration: September 1963-December 1965.
Investigator(s): John E. Chrietzberg, D.D.S., M.P.H., Director, Branch of Dental Health, and James F. Lewis, D.D.S., Acting Director, Dental Public Health Service, Georgia Department of Public Health, 47 Trinity Ave., S.W., Atlanta, Ga.

SOCIAL SERVICES

18-Y-1 ADOPTION OF AMERICAN INDIAN CHILDREN BY CAUCASIAN FAMILIES

Purpose: To follow a sample of families who adopted American Indian children through the Indian Adoption Project, a joint undertaking of the Child Welfare League of America and the U. S. Bureau of Indian Affairs, in order to evaluate the outcome of placements, thus providing information to the child welfare field relevant to the issue of promoting adoption of children across racial lines.
Methods: Annual research interviews with adoptive parents will be conducted for a five-year period to determine their degree of satisfaction with overall experience with these children. Measures of personal and social adjustment of the child will be developed, using reports of parents as well as independent reports secured from teachers in the schools children attend.
Duration: January 1964-1969.
Investigator(s): David Fanshel, D.S.W., Associate Professor, School of Social Work, Columbia University, New York, N. Y.
Cooperating group(s): Child Welfare League of America, Inc.; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-2 FACTORS ASSOCIATED WITH VARYING LEVELS OF ADJUSTMENT OF ADOPTED CHILDREN

Purpose: To identify factors associated with "good" versus "poor" adoptive placements with special attention to those factors known to agency or which could have been known to agency at time of placement.
Subjects: A random sample of 180 children, 7 through 10 years old, who were placed in adoption in infancy (less than 18 months of age) in homes in which there were no other children at time of placement.
Methods: Intensive analysis of initial adoptive study from case records, and information on current situation obtained through follow-up visits by professional caseworkers. Each adoptive parent will be separately interviewed, and child will be observed briefly during a home visit.
Duration: December 1963-July 1967.
Investigator(s): Lilian Ripple, Ph.D., Professor and Director, Research Center, School of Social Service Administration, University of Chicago, Chicago, Ill.
Cooperating group(s): Illinois Children's Home and Aid Society; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Publication is planned.

18-Y-3 FOLLOW-UP ADOPTION STUDY OF CHILDREN LEGALLY ADOPTED THROUGH THE CHILDREN'S AID SOCIETY, 1950-1957

Purpose: To study characteristic adjustment patterns of adoptive families at point of follow-up; to identify some factors responsible for differentiating most successful from least successful placements; in children's phase, to evaluate child's sense of identity, nature of child-parent relations in adoption, adopted child's concept of birth origin, and general level of adjustment.
Subjects: Sample of 200 families; 100 children, now ranging in age from 7 to over 15 years, selected from these families.

Methods: Questionnaire, data from records, and taped interviews.
Duration: 1960-1966.
Investigator(s): Elizabeth A. Lawder, D.S.W., Executive Director, Children's Aid Society of Pennsylvania, 311 S. Juniper St., Philadelphia, Pa. 19107.
Cooperating group(s): Graduate Department of Social Work and Social Research, Bryn Mawr College; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-4 DAY CARE -- THE UTAH STUDY

Purpose: To study need for day care services in Utah for preschool and school age children in the five Wasatch Front counties comprising approximately 75 percent of the State population: Box Elder, Weber, Davis, Salt Lake, and Utah.
Methods: Four independent studies used to collect data. (1) In a survey of mothers, 4,669 family units were randomly selected and screened to determine whether mothers worked at least five hours per week and whether children under age 17 were present. Of 1,112 mothers selected, 1,031 were interviewed using a 101-item schedule. An item analysis technique using 11 criteria as indicators of need yielded means and standard deviations for each item and provided frequencies, percentages, biserial correlations, and standard errors for each alternative. (2) Questionnaires were sent to 12 community service agencies; 10 replies were received and analyzed. (3) Questionnaires were sent to 68 day care centers. (4) Feasibility of day care centers based upon geographic area-population density data was computed. Finally, the four studies were compared.
Findings: All studies strongly suggest need for additional day care services. Survey of mothers suggests a particular need for services for preschool children, including infants. Mothers feel strongly about need for evening services and prefer group care centers and visiting homemaker services to family care. Agencies envision strong need for youth or after school centers; day care centers see a need for services for infants, hourly drop-ins, and the handicapped.
Duration: July 1963-June 1964.
Investigator(s): Frank Q. Sessions, Ph.D., Instructor in Sociology, University of Utah, and Eva V. Hancock, M.A., M.S.W., Executive Director, Community Services Council, Salt Lake City, Utah.
Cooperating group(s): Utah State Department of Public Welfare; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Report available from Community Services Council and Utah State Department of Public Welfare.

18-Y-5 BUCKHORN DAY CARE PROJECT

Purpose: To evaluate and demonstrate in a qualitative and quantitative manner what can be accomplished in the current and future provisions of an enriched day care program, supplemented by casework services to families of children receiving day care, in raising the level of their psychosocial, cultural, and intellectual performance.
Methods: Children will be followed as they move from day care program into public schools, and comparison will be made between these children and children from similar home situations who have not participated in day care program to determine what differences, if any, can be perceived in responsiveness to new learning challenges, ability to cope with tasks demanding sustained effort, relationship to peers and teachers, etc.
Duration: 1964-1968.
Investigator(s): Rita McMahon, M.A., Supervisor of Licensing, Kentucky Department of Child Welfare, Frankfort, and Frank Kodman, Ph.D., Associate Professor of Psychology, University of Kentucky, Lexington, Ky.

Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-6 THE DAY CARE EXCHANGE

Purpose: To subject an existing process, the private placement of children by their parents in an unrelated home for the purpose of receiving day care service, to an orderly investigation and evaluation to determine if this process can be effectively organized into a new type of day care resource.
Methods: Initially, existing private care in one area of Portland will be investigated. The new service arrangement will consist of a core of social work staff whose function will be to assist working parents in finding private families to care for their children. At the same time the private family will be involved in a voluntary educational-supervisory program to ensure the provision of adequate care.
Duration: 1963-1966.
Investigator(s): Gerald A. Frey, ACSW, Program Director, Friendly House, Inc., 2617 N.W. Savier, Portland 10, Oreg.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-7 UTILIZING DAY CARE SERVICES AS AN INTEGRAL PART OF THE AFDC PROGRAM

Purpose: To determine whether day care services are a significant and useful service, warranting their incorporation as an integral part of the Public Assistance Program; to restore AFDC families, using an experimental approach, to greater levels of self-sufficiency by means of day care services.
Subjects: 3 groups of 100 families.
Methods: Services of the Rhode Island Public Assistance and Child Welfare Services and both units of the Rhode Island Department of Social Welfare will be converged upon the selected families as a means of opening opportunity and stimulating positive, voluntary change. The first group of subjects will receive day care services and intensive social work services by professionally trained staff; the second group will receive professional social work services, but cannot be provided with day care; the third group will receive regular public agency services, but will receive neither day care nor professional social work services. Focal point of evaluation will be an assessment of differential outcomes of the three groups at conclusion of two-year project period.
Duration: July 1964-1966.
Investigator(s): John J. Affleck, ACSW, Assistant Director, Division of Community Services, Rhode Island State Department of Social Welfare, Providence, R. I.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-8 DAY CARE TREATMENT OF EMOTIONALLY DISTURBED CHILDREN

Purpose: To develop an interdisciplinary day care program with service, training, and research functions. The design of the program is to integrate treatment of parents with special education and psychotherapy for children. The day care setting with child remaining in his home will be used for study of family relationships with particular emphasis on interpersonal meaning of child's symptoms in the family and school.
Subjects: 24 emotionally disturbed children at Children's Psychiatric Hospital who are not educable in the regular school system, but not sufficiently dis-

turbed to justify hospitalization, and their parents. Availability of parents for family treatment will be a criterion for admission to the program.
Methods: Children will receive small group and individual remedial instruction, occupational therapy, recreational therapy, individual psychotherapy, and chemotherapy when indicated. Families will be divided into two groups. In the first, parents will be seen in parallel group psychotherapy in which the school principal will participate as an observer and will also deal directly with the parents in this group for administrative matters connected with school. The second group of parents will be seen in casework and will relate to school through the social worker. The relative effectiveness of the two treatment designs will be compared.
Duration: 1962-not reported.
Investigator(s): Jack C. Westman, M.D., Assistant Professor of Psychiatry, Daniel R. Miller, Ph.D., Professor of Psychology, Frank Wilderson, Ph.D., School Principal, William A. Bell, M.S.W., Staff Social Worker, and Eric Berman, Ph.D., Research Psychologist, Medical Center, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-Y-9 A DIVISION OF CASEWORK RESPONSIBILITY AS A METHOD OF WORKING WITH DISTURBED CHILDREN IN FOSTER CARE

Purpose: To demonstrate a new method, the division of casework responsibility into two parts (parental force and therapy), as a way of working with disturbed children in foster care, using the casework resources within the agency.
Subjects: A sample of 24 children between ages 7 and 16 who will be placed in foster care by Iowa Children's Home Society between December 1, 1963 and December 1, 1964, and who will remain under care of agency for at least two years. All are emotionally disturbed.
Methods: Cases will be assigned at random to one of two methods to be used. In first group, one worker will do all casework with child; in second, one caseworker will act as parental force worker and another caseworker will do casework therapy. Each case will be staffed every ten weeks with consulting psychiatrist and all crucial people. At time of intake, a battery of psychological tests will be given. Within first two months in care a series of tests will be administered including interviews with child, foster mother, school peers, teachers, and caseworker. Same tests will be given two years later for evaluative purposes.
Duration: December 1963-June 1966.
Investigator(s): Edith Zober, M.S.S.W., Research Director, Iowa Children's Home Society, 1101 Walnut St.; Milford P. Barnes, M.D., Medical Director, Des Moines Child Guidance Center, 1206 Pleasant St., Des Moines, Iowa, and Merlin Taber, Ph.D., Associate Professor, School of Social Work, University of Illinois, Urbana, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: A book is planned, directed to an audience of caseworkers working with children; tentative title: Parental Force.

18-Y-10 A VOCATIONAL DEVELOPMENT PROGRAM FOR EMOTIONALLY DISTURBED ADOLESCENTS IN RESIDENTIAL TREATMENT, GROUP HOME, AND FOSTER HOME PLACEMENT

Purpose: (1) To test hypothesis that initiating vocational habilitation services for emotionally disturbed adolescents in placement at age 14 will be more effective in promoting eventual vocational adjustment than will be initiating such services at more traditional age of 17; (2) to study the vocational development of such adolescents.

Subjects: Approximately 60 children receiving services from 4 agencies providing residential services to emotionally disturbed children.
Methods: Series of vocational services for 30 14-year old children focused on use of a rehabilitation workshop. Services are integrated into treatment programs of child care agencies. Vocational services will continue for approximately 4 years for each child. A group of older children will receive shorter-term services. Vocational outcomes in year following completion of individual programs will be compared for the two groups. Annual measures are being secured in order to study vocational development.
Duration: July 1963-October 1968.
Investigator(s): William Gellman, Ph.D., Executive Director, and Gisela Mendel, Ph.D., Research Associate, Jewish Vocational Service of Chicago, 1 S. Franklin St., Chicago 6, Ill.
Cooperating group(s): Jewish Federation of Metropolitan Chicago; Jewish Children's Bureau of Chicago; Illinois Children's Home and Aid Society; Illinois Lutheran Welfare Association; Mary Bartelme Home for Girls of Metropolitan Chicago; Vocational Rehabilitation Administration; and Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be reported in journal articles, progress reports, and a final report.

18-Y-11 DEVELOPMENT OF GROUP FOSTER HOMES FOR CHILDREN IN LONG-TERM CARE

Purpose: To demonstrate the feasibility of developing more stable family homes in an urban setting for children of minority groups, coming into custody of a public welfare department for long-term care.
Methods: Children in compatible groups of family size will be assembled and placed with foster parents employed by Family and Child Services, the homes to be supplied by the agency. Six such homes will be established with sufficient variation in their composition to test response to such facilities by children of different ages. Securities of employment provision of full supporting social services to children and foster parents are relied upon to ensure continued care.
Duration: April 1963-1967.
Investigator(s): Catherine Pratt, Project Director, Family and Child Services of Washington, D. C., 929 L St., N. W., Washington, D. C.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-12 THE EXTENT AND ADEQUACY OF THE EXISTING PHYSICAL PLANT, UNDER SOCIAL WORK AUSPICES, FOR THE GROUP CARE OF CHILDREN

Purpose: As beginning phase of ongoing research, study seeks to determine the extent and adequacy of the existing physical plant, and thus provide a gauge whereby society can relate current program needs and requirements to available capacity and condition of physical child care facilities. These factors, in combination with other critical considerations (not within scope of this study, i.e., availability of professional staff, organizational structure, etc.) would furnish ingredients necessary for preparation of feasible and achievable comprehensive child care program. Study will be limited to public and voluntary institutions under social work auspices for group care of children and will be based on a representative selection of public and voluntary institutions geographically distributed by program throughout the nation. All detailed information will be tabulated by public and voluntary character of institution, by state and region, and by type of group care facility.
Duration: June 1964-1966.
Investigator(s): Jack Meltzer, M.A., Director, Center for Urban Studies,

University of Chicago, Chicago, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-13 SUBSTITUTE CARE STUDY

Purpose: To determine need for substitute care for children who cannot remain in own homes; to plan means for providing care and/or means for preventing necessity for leaving home.
Duration: May 1964-not reported.
Investigator(s): Margaret A. Barrett, M.S.S.W., Assistant Executive Director, and staff, Richmond Area Community Council, 2501 Monument Ave., Richmond, Va. 23220. (Reported by Charles W. Fleming, Executive Director, Richmond Area Community Council.)
Cooperating group(s): Catholic Family and Children's Service; Jewish Family Service; Children's Home Society; Friends Association for Children; Henrico and Chesterfield Welfare Departments; Family and Children's Service, Richmond Welfare Department.

18-Y-14 CHILD WELFARE RESEARCH PROGRAM

Purpose: To develop a basic perspective for a five to seven year program of child welfare research in New York City, focusing mainly upon problems of group care for children, the institutionalization of services to children, and the task of developing innovations in services for long-term care of minority group children and children of poverty-stricken families. First year will be utilized for developing a "hard fact" study, looking at various patterns of care for children in New York City, particularly the "left out" child and sizing up problem's basic dimensions. Columbia University School of Social Work will be examining, with public and voluntary agencies, specific roles they might play within School's overall effort. Of particular importance will be exploration of feasibility of studying major policy issues permeating child welfare services in New York City.
Duration: July 1964-indefinite.
Investigator(s): David Fanshel, D.S.W., School of Social Work, Columbia University, New York 28, N. Y.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-15 A PROGRAM OF CHILD WELFARE RESEARCH AT THE JEWISH BOARD OF GUARDIANS

Purpose: This program of research is directed to one of the fundamental issues in child welfare, namely the avoidance of total separation and placement.
Methods: The placement decision will be analyzed and evaluated in terms of four dimensions: (1) level of personality growth and general well-being of child; (2) the constellation of factors bearing on the capacity of the family to provide nurture and protection for the child; (3) availability to the child of community resources to meet basic social needs as well as to supplement family capacity; and (4) the standards and norms of the placement agency itself, and as a surrogate of the community.
Duration: July 1964-June 1965.
Investigator(s): Herschel Alt, M.A., Executive Vice President, Peter B. Neubauer, M.D., Consultant Psychiatrist, and John Mann, Ph.D., Research Advisor, Jewish Board of Guardians, 120 W. 57th St., New York, N. Y. 10019.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-16 CHILD WELFARE PROGRAM OF RESEARCH

Purpose: To undertake a continuing research program in child welfare directed toward investigating theory and practice relative to provision of foster care. "Separation" is proposed as central organizing theme not merely because it is always involved in foster care, but because it appears to offer a fruitful focus for development of major theoretical formulations which may provide better bases for the two crucial decisions involved in providing foster care: (1) is foster care the suitable treatment method? and (2) what form of foster care should be provided?
Duration: August 1964-1969.
Investigator(s): Lilian Ripple, Ph.D., Director, Research Center, School of Social Service Administration, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-17 CHILD WELFARE STUDY OF ONONDAGA COUNTY, NEW YORK

Purpose: To identify children for whom agency services are requested, what services or care are available to them, what happens to those not accepted, and what additional services are needed but not available in the community.
Subjects: Children for whom a request for service was made between November 1963 and October 1964 in the following children's agencies (all of which offer some form of placement): Catholic Welfare, Child and Family Service, Children's Division, Jewish Family Service, and Probation Department.
Methods: Design provides for systematic data on all children receiving service in above agencies on a Census Day. State Department of Parole and 14 hospitals and schools serving mentally retarded, emotionally disturbed, or physically handicapped children also participated in this phase, providing similar information on all children up to 19 years from Onondaga City who were under care. Special forms used by staffs of the five participating agencies for Intake Study. In addition, a project worker visits agencies and secures further information. Referrals and refused requests are followed up by a project worker. All Census Day data is provided on prepared schedules. Other community agencies will be involved in a questionnaire and inventory related to resources.
Duration: January 1963-September 1965.
Investigator(s): Dorothy Giles, M.S.S., Project Director, Ruth Rothman, M.S.S., and Janet Weinandy, M.S.S., Social Workers, Child Welfare Study, United Community Chest and Council of Onondaga County, Syracuse, N. Y., and Bettye Caldwell, Ph.D., Research Consultant, Department of Pediatrics, Upstate Medical Center, State University of New York, Syracuse, N. Y.
Cooperating group(s): Onondaga County Mental Health Department; New York State Department of Social Welfare; Rosamond Gifford Charitable Corporation.
Publication: Material to be available through United Community Chest and Council of Onondaga County.

18-Y-18 CHILD WELFARE PROBLEMS IN AFRICAN DEVELOPING COUNTRIES

Purpose: To explore the special social and health needs of children under rapid change of industrial and political conditions in the newly independent countries of Africa.
Subjects: Children of families disrupted by urban attraction of village people to new industrial centers; children whose parents engage in industrial work; and children whose parents are working or remain in native villages.
Methods: (1) A systematic survey of the findings of the various international conferences sponsored by the United Nations or affiliated agencies (i.e., United Nations International Children's Emergency Fund, World Health Organization, Food and Agricultural Organization), the International Child Welfare

Union, as well as child welfare organizations in the United States and in several European nations concerned with community development; and (2) interviews and correspondence with experts assigned to African countries.
Findings: An urgent need for developing and strengthening family and child welfare services consonant with the specific cultural, religious, health conditions and habits of the various African countries, frequently different from Western society.
Duration: 1963-1964.
Investigator(s): Walter A. Friedlander, Ph.D., Professor of Social Welfare Emeritus, University of California, Berkeley, Calif.
Publication: To be submitted to appropriate journals.

18-Y-19 PROVISION OF CHILD WELFARE SERVICES WITH CHILDREN AND PARENTS AT HOME BY WORKERS WITHOUT PROFESSIONAL SOCIAL WORK EDUCATION

Purpose: To demonstrate what child welfare services can be given by workers without professional social work education, who receive special on-the-job training and professional supervision. Specifically: (1) to develop new or modified techniques for working with clients; (2) to devise means which can be used for better problem identification and client evaluation; (3) to work with community planning groups in order to coordinate community resources for a combined effort in meeting client needs; (4) to identify services these workers are able to provide; (5) to study content and method of training, and evaluate results on basis of worker performance at stages of training and experience; and (6) to determine size of manageable caseloads.
Subjects: Cases are selected from Aid to Families with Dependent Children caseload of Texas Department of Public Welfare.
Duration: 1963-indefinite.
Investigator(s): Price Parker, M.S.W., Regional Service Supervisor, Texas State Department of Public Welfare, Dallas 2, Tex.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-20 ALTERNATIVE DEPLOYMENT OF PUBLIC ASSISTANCE AND TRAINED CASEWORK PERSONNEL

Purpose: To assess the consequences of alternative assignments of public assistance and trained casework personnel in the Department of Welfare of the city of New York.
Subjects: 2500 clients, parents and children, served by a selected welfare center of the Department of Welfare.
Methods: Primarily "before" and "after" tests of dependent variables measuring "outcome," using structured interviews and selected records concerning knowledge, motivations, and behavior.
Findings: Initial findings should be available by June 1965; final results by June 1966.
Duration: July 1964-May 1966.
Investigator(s): Lawrence Podell, Ph.D., Director of Social Research, New York City Department of Welfare, 250 Church St., New York 13, N. Y.
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-21 CONTINUOUS CASE LOAD ANALYSIS PROJECT

Purpose: To develop a statistical reporting system for child welfare agencies designed to provide, by means of an annual census, systematic information on qualitative and quantitative aspects of an agency's client population and

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services to this population. System is intended to be applicable with appropriate modifications to other types of social welfare agencies.
Subjects: Total client population of Massachusetts Society for Prevention of Cruelty to Children.
Methods: (1) Development of data collection instrument; (2) testing instrument through statewide application on a quarterly basis with entire active caseload; and (3) modifying instrument on basis of staff experience during the several applications.
Duration: October 1963-March 1965.
Investigator(s): David G. Gil, D.S.W., Director of Research, Massachusetts Society for The Prevention of Cruelty to Children, 43 Mt. Vernon St., Boston 8, Mass.
Publication: Description of instrument and discussion of procedures to be published in a social work journal.

18-Y-22 A STUDY OF THE EFFECT OF TRAINING ON PERFORMANCE OF GROUP LEADERS SERVING ON A PART-TIME BASIS UNDER SUPERVISION OF PROFESSIONALLY TRAINED GROUP WORKERS

Purpose: To evaluate effectiveness of leadership training techniques in providing more effective work with children in groups; to compare group leadership training and direct supervisory conference methods; to study effect of training on learning abilities of part-time group leaders; and to examine way in which leadership training influences direct program services.
Methods: (1) Intensive record keeping on leadership training experience; (2) study of leadership attitudes before and after training program; and (3) examination of program content in relation to program.
Duration: 1963-1966.
Investigator(s): Jack Weiner, M.S.W., Assistant Director, Meyer Bass, M.S.W., ACSW, Executive Director, Richard Rabin, M.S.W., Director, Children and Youth Division, Rod Eglash, M.S.W., Tween and Youth Worker, Jewish Community Center of Milwaukee, 1400 N. Prospect St.; and Ferne Katleman, M.S.W., School of Social Work, University of Wisconsin, Milwaukee, Wis.
Publication: To be published in Jewish Community Center Program Aids, Journal of Jewish Communal Service, Social Work, and similar periodicals.

18-Y-23 A STUDY OF COUNSELOR-IN-TRAINING PROGRAM IN A SUMMER DAY CAMP AS IT AFFECTS CAREER CHOICES OF PARTICIPANTS

Purpose: To determine how an intensive counselor training program can be used to interest young teenagers in problems of child care and training for professional work.
Subjects: Teenagers.
Methods: Intensive record keeping on individuals in program; follow-up interviews after completion of program; and study of attitudes before and after training.
Duration: June 1963-1966.
Investigator(s): Rod Eglash, M.S.W., Youth Director, Jack Weiner, M.S.W., Assistant Director, and Richard Rabin, M.S.W., Director of Children and Youth Division, Jewish Community Center of Milwaukee, 1400 N. Prospect Ave., Milwaukee, Wis. 53202. (Reported by Meyer Bass, M.S.W., ACSW, Executive Director, Jewish Community Center of Milwaukee.)
Publication: To be published in Social Work, Journal of Jewish Communal Service, Jewish Community Center Program Aids, and similar periodicals.

18-Y-24 OPPORTUNITIES FOR YOUTH: A COMMUNITY ACTION AND RESEARCH PROJECT

Purpose: (1) To provide on-the-job training for young boys in general vocational skills such as responsibility, reliability, and conscientiousness; (2) to provide remedial educational guidance geared to boys' work experience; and (3) to alter participant's attitudes toward their educational and occupational potentials so that they can make more effective use of other educational and vocational programs provided by schools and other community projects.
Subjects: 14 and 15 year old boys (N=140) in 4 high-delinquency public housing projects in Seattle; equal number of boys for controls.
Duration: 1963-1965.
Investigator(s): Joseph L. Thimm, Acting Director, and staff, Metropolitan Youth Development Committee, Inc., 107 Cherry St., Seattle 4, Wash. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1963-1964.)
Cooperating group(s): Seattle Housing Authority; Municipal Advisory Commission on Youth (City of Seattle).

18-Y-25 NEIGHBORHOOD APPROACH TO MEXICAN-AMERICAN GANGS

Purpose: To test the effectiveness of a total neighborhood program on the reduction of "conflict gangs" within low income Mexican-American neighborhoods.
Subjects: Gang and pre-gang boys (young junior high school boys), parents of both, and significant adults within the two neighborhoods being studied.
Methods: A method of service will be used which is generic social work in that the individual, group and community will all be worked with. A sociologist will use standard procedures to evaluate this method.
Duration: June 1964-May 1967.
Investigator(s): Buford Farris, M.A., M.S.S.W., Executive Director, William Hale, M.S.S.W., Associate Director of Service, and Richard Brymer, (Ph.D. Candidate), Wesley Community Centers, 150 Colima St., San Antonio, Tex. 78207.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

18-Y-26 TOWARD SUPPORT OF A DEMONSTRATION PROJECT TO TEST AND EVALUATE THE SIGNIFICANCE OF A WORK CAMP EXPERIENCE IN PREVENTING SCHOOL DROPOUTS

Purpose: To test the work camp situation as an appropriate environment and instrumentality, supplementing the efforts of the schools and directed toward manpower improvement.
Methods: Using Turkey Mountain Camp as the setting, program content consists of work experience, independent study, recreation, guidance, outdoor life, and group experience.
Findings: Work camp experience for a high school boy having difficulty in school can be most significant. Project will be expanded if funds can be secured.
Duration: Summer 1962-1968.
Investigator(s): Domenick Allagio, M.A., Bayside High School, Flushing, L.I., N. Y. (Reported by Samuel C. Weir, Executive Director, Child Service League, 92-32 Union Hall St., Jamaica 33, N. Y.)
Cooperating group(s): W. T. Grant Foundation.
Publication: Yearly reports.

18-Y-27 COMMUNITY ACTION PROGRAM (CAP)

Purpose: To determine effective methods whereby a small professional staff,

within a limited time period, can help a multiproblem neighborhood to mobilize its resources and capacities for community improvement so that families and children will have greater opportunities for wholesome development.
Methods: Basic methodology is rooted in social work principles of involving the residents, the professionals, and the indigenous leaders in the process of identifying community problems and working toward their amelioration or resolution. Research efforts are pre-evaluative in nature and are geared to the analysis and assessment of action programs.
Duration: July 1961-1964.
Investigator(s): Sophie Engel, Director, and staff, Community Action Program, 2804 Third Ave., Bronx, N. Y. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1963-1964.)
Cooperating group(s): New York City Youth Board; Community Service Society.

18-Y-28 AVAILABILITY AND UTILIZATION OF RECREATION RESOURCES FOR CHRONICALLY DISABLED CHILDREN IN THE UNITED STATES

Purpose: To evaluate extent of recreation services offered to disabled children, and degree to which these children are needlessly segregated.
Methods: Extent of chronic disability in eight representative Standard Metropolitan Areas will be estimated from existing data; recreative programs available for various types and degrees of disability will be determined by a questionnaire and field survey. From these parameters, major deficiencies in service will be calculated. These data can then serve as a guide to further projects to improve recreation services in these areas and as a baseline from which to measure improvement achieved.
Duration: 1964-indefinite.
Investigator(s): John E. Silson, M.D., M.P.H., Research Coordinator, Doris L. Berryman, M.A., and William E. Knott, M.A., Recreation Specialists, Comeback, Inc., 16 W. 46th St., New York, N. Y. 10036.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

18-Y-29 A STUDY OF THE PROBLEMS OF INTEGRATING PHYSICALLY HANDICAPPED CHILDREN WITH NONHANDICAPPED CHILDREN IN RECREATIONAL GROUPS

Purpose: To conduct a research and demonstration program in the integration of physically handicapped children with nonhandicapped children in recreational groups; to evaluate efficacy of program in terms of identified variables indicative of "success" or "failure"; to examine whether there is any change in self-image of handicapped child, his peer relationships, and various aspects of his family adjustment; to examine attitudes of nonhandicapped children and their parents toward handicapped; and to identify factors that may make it possible to serve handicapped and children with special needs more effectively in normal community center setting.
Subjects: 35 handicapped children, nonhandicapped children, and their families.
Methods: An interdisciplinary approach utilizing medical and casework consultation in support of a group work and recreational program.
Duration: October 1962-November 1965.
Investigator(s): Victor D. Sanua, Ph.D., Director of Research, and Douglas Holmes, Ph.D., Associate Director of Research, Associated YM-YWHA's of Greater New York, 33 W. 60th St., New York 23, N. Y.
Cooperating group(s): Jewish Family Service; Montefiore Hospital; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

ORGANIZATIONS

ALABAMA

Draper Correctional Center 18-M-45
University of Alabama
    Educational Psychology 18-G-16
    Psychology 18-X-8

ARKANSAS

University of Arkansas
    Medical Center 18-T-28

CALIFORNIA

California State Department of Mental Hygiene 18-L-15
California State Department of Public Health 18-U-4, 18-V-7
Children's Hospital, Los Angeles
    Child Development Clinic 18-S-10, 18-W-7
Children's Hospital, San Francisco 18-A-12
Kaiser Foundation Health Plan
    Pediatrics 18-X-20
Los Angeles County Department of Community Services 18-O-14
Los Angeles County General Hospital
    Children's and Adolescent Psychiatric Services 18-L-26
Los Angeles County Probation Department 18-M-14, 18-M-24, 18-M-37
Metropolitan State Hospital 18-U-18
Reiss-Davis Clinic for Child Guidance 18-L-36
St. Joseph's Hospital
    Kennedy Child Study Center 18-D-18
San Diego State College
    Education 18-O-9
San Francisco State College
    Education 18-G-8
    Psychology 18-D-15
    Social Welfare 18-W-3
San Jose State College
    Sociology 18-M-18
San Mateo County Probation Department 18-M-18
School for Cerebral Palsied Children 18-T-40
Sonoma County Schools 18-G-1
Stanford University
    Anatomy 18-A-11
    Institute for Childhood Aphasia 18-T-36
Stanford University (cont'd.)
    Institute for Communication Research 18-F-6
    Laboratory of Human Development 18-K-18
    Psychiatry 18-K-4
    Psychology 18-D-11
University of California
    Berkeley
        Center for the Study of Law and Society 18-M-38
        Criminology 18-M-23, 18-U-21
        Institute of Human Development 18-A-5
        Psychology 18-V-6
        School of Public Health 18-X-20
        School of Social Welfare 18-M-25, 18-Y-18
        Science Curriculum Improvement Study 18-G-17
    Los Angeles
        Child Amputee Prosthetics Project 18-T-45
        Neuropsychiatric Institute 18-L-21, 18-L-30, 18-U-30, 18-X-14
        Physical Education 18-C-9
        Psychology 18-L-24, 18-L-34
        School of Medicine 18-B-3, 18-K-1, 18-L-20
    San Francisco
        Biomechanics Laboratory 18-T-44
    Santa Barbara
        Psychology 18-G-14
University of San Francisco
    Psychology 18-S-11
    Testing and Counseling Center 18-O-16
University of Southern California
    School of Medicine 18-P-5, 18-S-8, 18-X-34
    School of Social Work 18-M-55
    Youth Studies Center 18-M-53, 18-U-6
Youth Opportunities Board of Greater Los Angeles 18-M-34

COLORADO

Colorado Springs Public Schools 18-Q-20
Denver Department of Welfare 18-U-24
University of Colorado
    Child Research Council 18-A-1
    School of Medicine 18-U-23

University of Denver
  Psychology 18-D-13

CONNECTICUT

Gesell Institute of Child Development 18-D-6, 18-J-3, 18-T-27
University of Connecticut
  School of Social Work 18-S-37
Yale University
  Psychology 18-O-7
  School of Medicine 18-A-12

DELAWARE

University of Delaware
  Center for Research on Social Behavior 18-K-10--12
  Education 18-G-6, 18-K-8

DISTRICT OF COLUMBIA

Bureau of Social Science Research 18-M-57
Catholic University of America
  Psychology 18-S-27
D. C. Department of Health
  Bureau of Maternal and Child Health 18-T-1
D. C. Society for Crippled Children 18-T-37
Family and Child Services of Washington, D. C. 18-K-6, 18-Y-11
Gallaudet College
  English 18-Q-15
George Washington University
  Psychology 18-D-12
Howard University
  Dentistry 18-C-14, 18-T-5
  Home Economics 18-Q-8
Institute of Educational Research 18-S-24

FLORIDA

Children's Center, Miami 18-Q-22
Escombia County Guidance Clinic, Inc. 18-H-11
Henderson Clinic 18-N-4
Hillsborough County Public Schools 18-N-17
Sunland Training Center 18-S-39
University of Florida
  Education 18-G-13
  J. Hillis Miller Health Center 18-T-15, 18-U-13
  P. K. Yonge School 18-O-11
  Psychiatry 18-L-41, 18-T-42
University of Miami
  Education 18-Q-22
  Psychology 18-U-7, 18-W-4

GEORGIA

Emory University
  School of Medicine
    Children's Unit 18-T-29
    Gynecology-Obstetrics 18-X-22
Georgia Institute of Technology 18-D-21
Georgia State Department of Education 18-R-1
Georgia State Department of Public Health
  Dental Public Health Service 18-X-43
University of Georgia
  Education 18-O-8
  Psychology 18-G-3, 18-G-4
  Special Education 18-R-1

HAWAII

Hawaii State Department of Health 18-L-3, 18-T-18
University of Hawaii
  Child Development and Family Study 18-W-5

ILLINOIS

Chicago Board of Health 18-C-3
Dixon State School 18-L-31, 18-S-26
Illinois State Pediatric Institute 18-S-16
Illinois State University
  Health and Physical Education 18-C-12, 18-G-10
Jewish Vocational Service of Chicago 18-Y-10
La Rabida Jackson Park Sanitarium 18-X-29
Michael Reese Hospital
  Institute for Psychosomatic and Psychiatric Research and Training 18-B-4
National College of Education 18-S-34
Northern Illinois University
  Psychology 18-O-5
Orchard School for Retarded Children 18-S-34
Southern Illinois University
  Center for Study of Crime, Delinquency, and Corrections 18-M-2, 18-Q-1
  Education 18-G-15

- Stickney Public Health District 18-X-36
- University of Chicago
  - Anthropology 18-C-13
  - Center for Urban Studies 18-Y-12
  - School of Social Service Administration 18-X-29, 18-Y-2, 18-Y-16
- University of Illinois
  - Dentistry 18-X-35
  - Education 18-S-8
  - Educational Psychology 18-N-2
  - Institute for Research on Exceptional Children 18-U-12
  - Psychology 18-O-10
  - Social Work 18-Y-9
  - Speech and Hearing Clinic 18-D-3, 18-X-1

INDIANA

- Goshen College
  - Sociology 18-U-5
- Indiana State Board of Health
  - Division of Dental Health 18-X-38
- Indiana University
  - Medical Center 18-Q-7, 18-T-30, 18-U-31
- Indianapolis Public Schools 18-P-6
- Purdue University
  - Elementary Education 18-K-19
  - Psychology 18-H-2
- Valparaiso University
  - Psychology 18-Q-18

IOWA

- Des Moines Child Guidance Center 18-Y-9
- Iowa Children's Home Society 18-Y-9
- Iowa Training School for Boys 18-M-30
- State University of Iowa
  - Dentistry 18-C-16
  - Pediatrics 18-T-41
  - Physical Education 18-C-11
  - Speech Pathology 18-T-7

KANSAS

- Institute of Logopedics 18-A-13, 18-T-2, 18-T-38
- University of Kansas
  - Bureau of Child Research 18-F-2
  - Medical Center 18-C-8, 18-S-35, 18-X-5

- University of Kansas (cont'd.)
  - Midwest Psychological Field Station 18-N-8, 18-W-12
- University of Wichita
  - Sociology 18-T-2

KENTUCKY

- Kentucky Department of Child Welfare 18-Y-5
- University of Kentucky
  - Psychology 18-U-11, 18-Y-5
  - Rural Sociology 18-N-12
- University of Louisville 18-M-17

LOUISIANA

- Charity Hospital, New Orleans 18-A-12
- Louisiana State University
  - Psychology 18-L-7
- Tulane University
  - Hygiene and Tropical Medicine 18-X-23

MAINE

- Maine State Department of Education 18-O-15

MARYLAND

- Baltimore City Public Schools 18-N-20
- Board of Education of Baltimore County 18-P-1
- Johns Hopkins University
  - Child Psychiatry 18-L-33
  - Medical Psychology and Pediatrics 18-D-16
  - Medicine 18-A-12
  - Pediatrics 18-X-33
  - Psychology 18-B-1
  - School of Hygiene and Public Health 18-E-2, 18-S-1
  - Social Relations 18-M-19
- Maryland State Department of Public Welfare 18-M-54
- Potomac Junior/Senior High School 18-O-1
- University of Maryland
  - Bureau of Educational Research and Field Services 18-N-19
  - Physical Education and Health Education 18-P-10
  - Psychology 18-V-9
  - School of Medicine 18-T-24

MASSACHUSETTS

- Boston City Hospital 18-X-37
- Boston College
  - Education 18-O-13
- Boston Lying-In Hospital 18-A-12
- Boston Medical Foundation 18-H-10
- Boston University
  - Education 18-C-10
  - Psychology 18-D-14
- Brandeis University
  - Social Welfare 18-H-10, 18-M-35, 18-X-37
- Brookline Dental Clinic 18-X-37
- Children's Hospital Medical Center
  - Neurology 18-T-33
- Children's Medical Center 18-A-12
- Greater Lawrence Guidance Center, Inc. 18-X-12
- Harvard University
  - Anthropology 18-H-9
  - Biostatistics 18-A-2, 18-X-8, 18-X-25
  - Center for Cognitive Studies 18-G-12
  - Education 18-W-1
  - Epidemiology 18-L-23
  - Laboratory of Human Development 18-W-2
  - Law School 18-M-4, 18-M-8, 18-M-32
  - Maternal and Child Health 18-X-18
  - Nutrition 18-C-7
  - Physiology 18-A-4
  - Psychiatry 18-X-7
  - Social Relations 18-H-9
- Massachusetts General Hospital
  - Child Psychiatry Unit 18-L-27, 18-L-28
- Massachusetts Mental Health Center 18-U-19
- Massachusetts Society for the Prevention of Cruelty to Children 18-Y-21
- Massachusetts State Department of Public Health 18-H-10
- Mount Holyoke College 18-G-9
- South Shore Mental Health Center 18-N-6
- Tufts University
  - Institute for Psychological Research 18-T-23
- University of Massachusetts
  - Psychology 18-S-29
- Walter E. Fernald State School 18-S-4

MICHIGAN

- Children's Charter of the Juvenile Courts of Michigan, Inc. 18-M-47
- Detroit Day School for Deaf 18-T-22
- Kalamazoo County Juvenile Court 18-M-40
- Lafayette Clinic 18-D-1, 18-L-13
- Merrill-Palmer Nursery School 18-N-9
- Michigan State University
  - Psychology 18-D-7, 18-U-16, 18-V-4
  - Sociology 18-H-5
- University of Michigan
  - Children's Psychiatric Hospital 18-L-6
  - Educational Psychology 18-Q-21
  - Institute for Social Research 18-M-1, 18-W-15
  - Maternal and Child Health 18-X-21
  - Population Studies Center 18-U-1, 18-U-2
  - Psychology 18-K-17, 18-N-18
  - School of Medicine 18-L-16, 18-U-3, 18-Y-8
  - Sociology 18-M-26
  - Speech Clinic 18-T-9, 18-T-13
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RESEARCH CENTER ON LEARNING PROBLEMS

The first national center to study learning problems is soon to be established at the University of Wisconsin. Under a cooperative agreement between the University and the U. S. Office of Education, the center will carry out a program of research under the co-direction of Dr. Herbert Klausmeier and Dean Lindley Stiles. Federal support will be given over an initial period of five years.

CLEARINGHOUSE FOR INFORMATION ON DISADVANTAGED

An Information Retrieval Center on the Disadvantaged has recently been established in the Graduate School of Education, Yeshiva University, New York, N. Y. The IRCD is designed to serve "as a clearinghouse for information concerning problems, theory, research, programs and practices, materials and other developments in the field of compensatory education on elementary, secondary, and collegiate levels," both nationally and internationally. The *IRCD Bulletin*, a semimonthly publication of the Center, includes recent news and selected bibliographies. Services of the Center are available to interested professionals at a nominal charge.

NEW BIBLIOGRAPHIES ON DISADVANTAGED

Under a grant from the U. S. Office of Education, the Center for Cultural Studies of Adams State College (Alamosa, Colo.) has compiled an annotated bibliography of resource materials on migrants and the culturally and educationally disadvantaged. The official publication title is: *Guide to Resource Materials--knowing and educating migrant, culturally disadvantaged, undereducated adults*. The Guide includes references to materials on all aspects of educating the undereducated adult and child, their personal characteristics and culture, and the society of which they are a part.

A new selected bibliography entitled *A Guide to Resources for Antipoverty Programs* is available from the Federation Employment and Guidance Service, 215 Park Avenue South, New York, N. Y. 10003. A "Selected List of Recent Basic Readings Related to the War on Poverty" is appended to the 18-page Guide.

HEW GRANTS SUMMARY NOW AVAILABLE

A recent HEW publication summarizes financial aid programs administered by that agency. *Grants-in-Aid and Other Financial Assistance Programs Administered by the U. S. Department of Health, Education, and Welfare, 1964-65* contains descriptions of each type of financial aid--"its purpose; financing; method by which Federal funds are distributed; matching requirements, where these apply; who may receive Federal funds; how application for funds is made; significant developments during the past year; and the legal basis under which funds are made available." The publication may be obtained at a cost of $2.50 from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, and may be found in many libraries.

REVISED MENTAL RETARDATION AND ABUSED CHILD LISTINGS

Research Relating to Mentally Retarded Children, first published by the Children's Bureau Clearinghouse in 1960, is currently being revised to include studies reported to the Clearinghouse between August 1959 and December 1964. The updated publication is expected to be available in late 1965. Also undergoing revision is the "Bibliography on the Battered Child"; copies should be available in fall 1965.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. (Gives synopses of U. S. doctoral dissertations with an annual index.)
dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington 2, D. C.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y.
Inventory of Social and Economic Research in Health, Health Information Foundation, 420 Lexington Ave., New York 17, N. Y.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York 17, N. Y.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington 6, D. C.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York 3, N. Y.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York 24, N. Y.
Sources of Morbidity Data, Clearinghouse on Current Morbidity Statistics Projects, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

The Excerpta Medica Foundation, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y., has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, Excerpta Medica can provide to subscribers, at cost, photocopies and translations of complete articles.

The Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Science Information Exchange, Smithsonian Institution, 313 Universal Bldg., Connecticut and Florida Aves., N. W., Washington 6, D. C., provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

BEST COPY AVAILABLE

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name____

Address______________________________________

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Name____

Address______________________________________

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CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D.C. 20201

If you or your colleagues are currently engaged in research on children or their families, we would greatly appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to provide research investigators with information about other research in progress, to point up gaps in present research, and thereby to stimulate more effective research.

The instructions on the third page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

____

Thank you for your cooperation.

INFORMATION SUPPLIED BY

Name ______________________________

Position ______________________________

Organization and address ____________________

____

____

SUMMARY OF RESEARCH PROJECT

Title:

Purpose:

Subjects (sample):

Methods:

Findings to date, if any:

Date project initiated: Estimated terminal date:

Principal investigator(s) only Degree Position and organization

Cooperating groups (in the research or in the funding of the research):

Publication references and/or plans (If no publication is planned, please indicate under what conditions data and results will be available):

If this represents work toward an academic degree, please state degree ____________________.
(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry.)

INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

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RESEARCH RELATING TO CHILDREN

Single copies of the following issues are available without charge from the Clearinghouse, Children's Bureau, Washington, D. C. 20201:

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Bulletin 10 (March-July 1959)
Bulletin 11 (August 1959-February 1960)
Bulletin 12 (February-July 1960)
Bulletin 13 (August 1960-January 1961)
Bulletin 14 (February-September 1961)
Bulletin 15 (October 1961-June 1962)

An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. Additional free copies are available to directors of research centers and to libraries upon direct request to the Clearinghouse, Children's Bureau, Washington, D. C. 20201.

The Clearinghouse will be happy to add anyone to the mailing list to be notified whenever a new issue is published.

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research with children in order to keep investigators informed of the work of other investigators, to point up gaps in present research, and hopefully to stimulate more effective research programs.

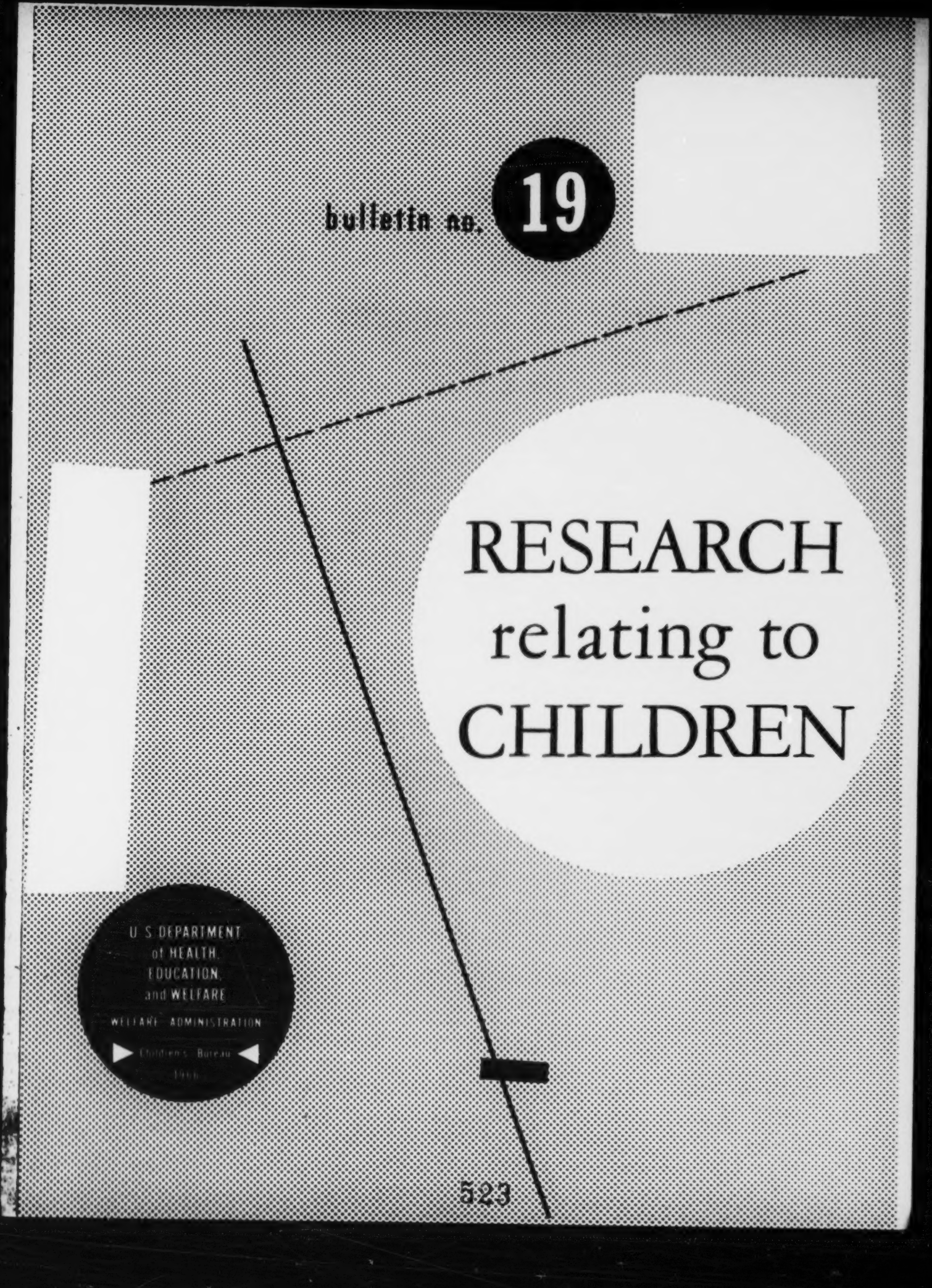
Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. Additional free copies of each issue are sent to directors of research programs and to libraries. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Clearinghouse maintains a mailing list of persons to be notified whenever a new issue is published, usually twice a year.

The Children's Bureau Clearinghouse routinely exchanges information with other clearinghouses in related fields such as the National Research and Information Center on Crime and Delinquency of the National Council on Crime and Delinquency, and the U.S. Public Health Service Clearinghouse on Current Morbidity Statistics Projects. The Science Information Exchange is very helpful in providing abstracts of research supported by federal funds and by large foundations.

The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
WELFARE ADMINISTRATION

Children's Bureau Washington, D.C. 20201



bulletin no. 19

RESEARCH relating to CHILDREN

U S DEPARTMENT
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Children's Bureau

1966

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RESEARCH relating to CHILDREN

bulletin 19

studies in progress on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIAL, ECONOMIC, and CULTURAL INFLUENCES
- HEALTH SERVICES and SURVEYS
- SOCIAL SERVICES

January-September 1965

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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FOREWORD

This Bulletin like previous issues, includes reports of research in progress or research very recently completed. It does not report again studies included in Bulletin 3 through 18 even though they are still continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse January 1, 1965 through September 30, 1965.

The Clearinghouse has only such information about the research projects as the abstracts provide. Publication references and plans are given for some of the projects, but the Clearinghouse cannot attempt to keep track of the final publication of the studies. The reader who wishes to obtain further information about any of the projects reported should write directly to the investigator or check professional jornals in the appropriate field.

For the Clearinghouse, I wish to thank those who have submitted reports and to acknowledge the valuable assistance of the National Clearinghouse on Mental Health Information, the Science Information Exchange, and the several foundations which provide us with information about recent research grants.

Katherine B. Oettinger

Katherine B. Oettinger
Chief, Children's Bureau
WELFARE ADMINISTRATION

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 247 is a form for letting us know of other investigators who are working in the field. Page 250 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

19-AA-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver 20, Colo.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; Nutrition Foundation; National Live Stock and Meat Board; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Appropriate medical or scientific journals every year. Publication lists available.

19-AA-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Investigator(s): Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

19-AA-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-AA-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from prepuberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Assistant Professor of Physiology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publication: Numerous journal articles; one book is planned, another possible.

19-AA-5 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT

Purpose: To investigate the relationship of biologic, genetic, and environmental factors in the parents--including events during pregnancy, labor, and delivery--to normal and abnormal development of offspring. Expected by-products of investigation are relationships of these factors to pregnancy wastage in the form of early fetal death, perinatal mortality, infant and childhood mortality, and estimates of incidence of different types of abnormalities. In addition, detailed growth curves for children from birth to six years of age will be derived on a longitudinal basis, and estimates of illnesses and injuries in infancy and the preschool child will be derived.
Subjects: Members of the Kaiser Foundation Health Plan--a prepaid medical care program--who reside in the San Francisco-East Bay area.
Methods: Study is of a prospective, longitudinal type for both mother and child. Observations are made on the gravidas in the Department of Obstetrics and Gynecology, and on the children in the Pediatric Department, and are supplemented by special interviews and laboratory examinations. Physicians' observations are systematized and made more uniform. Special efforts are made to obtain information on members of study who do not return to the plan for medical care.
Duration: July 1959-indefinite.
Investigator(s): Jacob Yerushalmy, Ph.D., Professor of Biostatistics, University of California, Berkeley; Alexander L. King, M.D., Director of Pediatrics; and Robert W. King, M.D., Consultant, Department of Obstetrics and Gynecology, Kaiser Foundation Hospital, Oakland, Calif. (Reported by C. H. Peckham, M.D., 3783 Piedmont Ave., Oakland, Calif. 94611.)
Cooperating group(s): Division of Biostatistics, School of Public Health, University of California; Permanente Medical Group; Kaiser Foundation Research Institute.
Publication: Yerushalmy, J., "Statistical Considerations and Evaluations of Epidemiological Evidence," in Tobacco and Health, Chas. C. Thomas, publisher, 1962. American Journal of Obstetrics and Gynecology 87:5:609-620, November 1, 1963; 88:4:505-518, February 15, 1964. Vox Sanguinis 8:376-377, May-June 1963; 8:549-556, September-October 1963; 9:502-504, 1964. Human Biology 36:2:86-103, May 1964. Obstetrics and Gynecology 24:5:707-715, November 1964. American Journal of Diseases of Children 109:43-57, January 1965.

19-AA-6 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (35 years).
Subjects: Full term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above average group. 100 offspring of these subjects, age range from a few months to about 16 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs and skeletal X-rays taken at most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.

Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Associate Research Psychologist, Institute of Human Development, University of California, Berkeley 4, Calif.
Cooperating group(s): Institute of Human Development, University of California.
Publication: Studies in the Development of Young Children, University of California Press, 1940. Growth Diagnosis, University of Chicago Press, 1959. Child Development 12:167-173, 1941; 27:45-74, 1956. American Psychologist 10:805-818, 1955. Monograph, Society for Research in Child Development 28, 1963.

19-AA-7 THE MEDFORD, OREGON BOYS' GROWTH STUDY, 7 TO 18 YEARS

Purpose: To construct structural, strength, and motor cross-sectional, convergence, and longitudinal growth curves for boys 7 to 18 years of age; to study individual differences at all ages; to relate the various structural, strength, and motor tests to maturity, physique type, social-personal adjustment, interests, and scholastic aptitude and achievement; to contrast all traits for boys at different levels of athletic ability.
Subjects: Cross-sectional sample: 40 boys at each age, 9 through 15 years. Longitudinal sample: over 100 boys at each age, 7, 9, 12, and 15 years.
Methods: (1) Construction of mean growth curves; study of individual differences by use of range, standard deviation, and coefficient of variation; (2) contrast of maturity groups and somatotype categories; (3) factor analyses at single ages; (4) contrast of athletes and nonparticipants, longitudinally and cross-sectionally; and (5) determination of relationships through correlation, multiple correlation, and partial correlation; utilization of multiple regression equations.
Duration: October 1956-May 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor of Physical Education, University of Oregon, Eugene, Oreg.
Cooperating group(s): Medford, Oregon Public Schools; Southern Oregon College; Athletic Institute; Curriculum Development Fund of the Oregon State Department of Education; Office of Scientific and Scholarly Research and School of Education In-Service Program, University of Oregon.
Publication: To date, 34 completed master's theses and doctoral dissertations are available in Microcard form; a number of articles and review statements have been published.

19-AA-8 PATTERNS OF SOOTHING AND EXCITATION IN NEONATES

Purpose: To investigate the role of excitatory and inhibitory patterns in neonatal development through use of behavioral ratings and heart rate measurements. This research is part of a long-term study of regulatory principles and mechanisms which govern neonatal behavior (see Bulletin 5, Research Relating to Children).
Subjects: Normal, healthy, 2 to 5 day old full term babies born at Bronx Municipal Hospital Center.
Methods: Heart rate and behavioral ratings obtained for all experimental sessions. Each neonate tested at three sessions: test, retest on reactions to a series of soothing stimuli, and one session of trials of excitatory stimuli. Soothing stimuli applied when neonates are aroused are a tone, rocking, sweetened pacifier inserted in babies' mouths, immersion of babies' feet in warm water, and a control period. Each stimulus condition applied three times. Excitatory stimuli applied after

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feeding when neonates are quiescent are a tone, cold disc applied to the abdomen, and rocking.
Findings: Data analyzed with respect to (1) relationship between heart rate and behavioral ratings; (2) individual differences in overall soothability and in most effective soothing stimuli; (3) test-retest reliability on successive days; and (4) relationship between excitatory and inhibitory patterns.
Duration: January 1962-continuing.
Investigator(s): Sibylle Escalona, Ph.D., Professor of Psychology in Psychiatry, Wagner H. Bridger, M.D., Assistant Professor of Psychiatry, Beverly M. Birns, Ph.D., and Marion Blank, Ph.D., Instructors in Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-AA-9 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semiannual follow-up of more than 2,000 children registered at the Institute.
Methods: School Series: initially based on 600 school children in 5 schools (now 22 schools), ages 6-12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays. American Negro Series: 150 Negro children with normal occlusion selected to study with a view to establishing tentative standards of facial growth. Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc. Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made. Orthodontic Treatment Series: a small pilot study of 15 white boys, age 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment. Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate. Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as facio-dental growth dysplasia. Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern. Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional stability, and other aspects of classroom behavior to see if there is any real correlation.
Duration: 1947-1967.
Investigator(s): Wilton M. Krogman, Ph.D., Director, Philadelphia Center for Research in Child Growth; and F. E. Johnston, Ph.D., Assistant Professor of Anthropology, University of Pennsylvania, Philadelphia, Pa.
Cooperating group(s): Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

19-AA-10 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns of all children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Co-chairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto, Calif.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publication: Journal of Clinical Endocrinology and Metabolism, 22:1127-1129, November 1962; Journal of Pediatrics, 62:5:631-645, May 1963.

19-AA-11 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland 1, Oreg.
Cooperating group(s): University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Recent articles: Radiology, April 1961; July 1962. Journal of Dental Research, July-August 1961; July-August 1962. Human Biology, February and September 1962.

19-AA-12 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4483 Cleveland children; 134 Boston children; and a sample of Detroit children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to

provide standards of reference.
Duration: 1948-1966.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., Professor and Head, Department of Anatomy, Stanford University, Stanford, Calif.
Cooperating group(s): Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.
Publication: Current standards: *Radiographic Atlas of Skeletal Development of Elbow and Shoulder*; *Radiographic Atlas of Skeletal Development of Hip*. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.

19-AA-13 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 15 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956.
Investigator(s): Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C.
Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Oreg.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publication: *Johns Hopkins Magazine*, June 1959.

19-AA-14 RESEARCH ON SPEECH AND LANGUAGE DISORDERS

Purpose: To investigate etiology, prevention, and rehabilitation in speech and language disorders of children with cerebral palsy, aphasia, cleft palate, endocrine disorders, mongolism, or mental deficiency.
Subjects: Study group chosen from clinical population, approximately 1,500 cases, and matched with normal controls.
Methods: Basic studies on anatomy and functional larynx, respiration, etc., including X-ray measurements and similar techniques; various other research methods (generally behavioral items) depending upon area under study.
Initiation date: 1934.
Investigator(s): Martin F. Palmer, Sc.D., Director, Institute of Logopedics, 2400 Jardine Dr., Wichita 19, Kans.
Cooperating group(s): Federally supported.
Publication: Articles appearing regularly in *Journal of Speech and Hearing Disorders*, *Journal of Speech and Hearing Research*, *Cerebral Palsy Review*, etc.

19-AA-15 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Initiation date: 1936.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group(s): Lilly Endowment, Inc.
Publication: Published in *Union College Studies in Character Research*. Also *Dimensions of Character*, Macmillan, 1956.

GROWTH AND DEVELOPMENT

General

19-BA-1 EXPERIMENTAL INVESTIGATION OF EXPLORATORY BEHAVIOR IN CHILDREN

Purpose: To investigate habituation to novelty and to complexity both of stimuli and of environments.
Subjects: Nursery school children, brain-damaged children and autistic children.
Methods: Check list and film recordings of behavior in specified stimulus conditions, i.e., in the presence of a novel object or complex object.
Findings: A monotonic decay of exploratory behavior with time in normal children, but no monotonic relationship found in autistic children.
Duration: November 1963-1966.
Investigator(s): Corinne Hutt, B.Sc., Research Psychologist, Park Hospital for Children, Headington, Oxford, England.
Publication: Paper to be read at Symposium of the London Zoological Society, November 1965; another paper in preparation.

19-BA-2 NATIONAL CHILD DEVELOPMENT STUDY (1958 COHORT)

Purpose: To follow up all children born in one week in 1958 in England, Scotland, and Wales for whom uniquely comprehensive data were collected before and during birth by Dr. N. R. Butler (published in *Perinatal Mortality Survey*, 1963). The aims are twofold: (1) to investigate present physical, educational, and psychological development of these children; and (2) to identify all those who now give concern, be it because of physical, mental or social handicaps.
Subjects: A national sample of 17,000 boys and girls, now aged seven years.
Methods: Three comprehensive questionnaires have been developed, the information to be obtained by personal interview. The first is an educational one, which includes some scholastic and psychological tests to be administered by the school--the child's present behavior and adjustment in school, educational and social progress are being investigated. Secondly, the parental questionnaire to be administered by social workers, in most cases, Health Visitors, aims at obtaining from the mother information on the child's overall progress and adjustment. Thirdly, a medical questionnaire has been prepared, to be completed following a special examination of the child.
Duration: October 1964-October 1967.
Investigator(s): N. R. Butler, M.D., M.R.C.P., D.C.H., Professor of Child Health, University of Bristol, Bristol; M. L. Kellmer Pringle, Ph.D., Director; and R. Davie, Esq., B.A., Senior Research Officer, National Bureau for Cooperation in Child Care, Adam House, 1 Fitzray Square, London W1, England.
Cooperating group(s): Institute of Child Health, University of London; National Birthday Trust Fund; National Foundation for Educational Research; National Bureau for Cooperation in Child Care.

19-BA-3 A FOLLOW-UP STUDY OF A SELECTED SAMPLE OF JUNIOR SCHOOL CHILDREN NOW AGED FIFTEEN YEARS

Purpose: To gain information on the education, social and emotional development, ambitions, and career prospects of children who had been the subjects of a longitudinal study during the ages of 7 to 11 years; secondly, to investigate whether the influence of two very different types of educational methods and organization has had any lasting influence once the children had gone to different schools.
Subjects: 81 boys and girls living in small Midland towns.
Methods: A battery of attainment tests was given; each child was individually interviewed to investigate his attitudes to his present and past schools, his leisure interests, ambitions, etc.; detailed readings and other information were obtained from teachers as well as from parents.
Duration: 1964-1965.
Investigator(s): M. L. Kellmer Pringle, Ph.D., Director, and Stanley Gooch, B.A., Senior Research Officer, National Bureau for Cooperation in Child Care, Adam House, 1 Fitzroy Square, London W1, England.
Cooperating group(s): Department of Education and Science.
Publication: Three papers are ready for publication.

19-BA-4 LONGITUDINAL STUDY OF THE ALL AROUND DEVELOPMENT OF JUNIOR SCHOOL CHILDREN

Purpose: To gain continuous and comprehensive information on educational, social and emotional development during this period; secondly, to compare the influence, if any, of two different types of educational methods and organization on children's adjustment and learning--i.e., a traditional, mainly adult-directed form emphasizing competition as against a progressive, mainly child-centered form stressing cooperation.
Subjects: 250 boys and girls, aged 7 to 11 years, living in small Midland towns.
Methods: During each of the four years, various aspects of the children's development are examined both by individual and group methods. Wherever possible, the same measures and tests are used in each of the four years. Over 100 assessments and tests are applied, ranging from attainment to personality and aptitude tests. Detailed ratings and other information are also obtained each year from the teachers, and the cooperation of the parents is also enlisted.
Findings: So far six papers have been published.
Duration: 1957-1966.
Investigator(s): M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Cooperation in Child Care, Adam House, 1 Fitzroy Square, London W1, England.
Cooperating group(s): Postgraduate students in Educational Psychology, University of Birmingham; three charitable foundations.
Publication: Gegenwartsprobleme der Entwicklungspsychologie (Festschrift fur Charlotte Buhler), 104-114, 1963; British Journal of Educational Psychology 33, 1963; Journal of Child Psychology and Psychiatry 4, 1963; British Journal of Social and Clinical Psychology 3, 1964; British Journal of Educational Psychology 35, 1965.

19-BA-5 FAILURE TO THRIVE IN INFANTS

Purpose: To explore pertinent psychological and social factors that contribute to the development of the syndrome.
Subjects: Infants from underprivileged families.

Methods: Interdisciplinary clinical observations, including pediatric and psychiatric interviewing, observations by nursing personnel, home visits, and homemaker observations.
Findings: Preliminary report given at recent meeting of Pediatric Outpatient Clinics.
Duration: 1964-1967.
Investigator(s): Albert J. Solnit, M.D., Professor of Pediatrics and Psychiatry, and Martha Leonard, M.D., Assistant Professor of Pediatrics, Yale University School of Medicine, New Haven, Conn. 06510.
Cooperating group(s): Visiting Nurses Association of New Haven; Family Service of New Haven, Inc.
Publication: Publication in established scientific journals is planned.

19-BA-6 STUDY OF PREMATURES

Purpose: To investigate effect of birth weight and gestation time upon later mental development while controlling for neurological status, social class, and maternal practices.
Subjects: 992 infants born in Baltimore in 1952, 500 of whom were less than 2501 grams birth weight.
Methods: Subjects were examined at 40 weeks, 3-5 years, 6-7 years, and 9-10 years of age, collecting neurological, social history, and psychological test data. Current data collection includes academic achievement at 12 years of age.
Duration: 1952-1966.
Investigator(s): Gerald Wiener, Ph.D., Director, Study of Prematures and Associate Professor, School of Hygiene and Public Health, Johns Hopkins University, Baltimore 5, Md.
Publication: Pediatrics 34:3:434-444, March 1965. Several additional publications are planned regarding neurological, behavioral, and academic correlates of low birth weight.

19-BA-7 INFANT PSYCHOPHYSIOLOGICAL SYSTEMS

Purpose: A systematic examination of the level of activation in neonates and infants from a developmental as well as an ontogenetic point of view with emphasis upon sets of factors which produce changes in the level of activation.
Subjects: Newborn infants and progressively older infants.
Methods: Psychophysiological and behavioral measures recorded initially during nursery period, then at selected monthly intervals, with the following specific aims: (1) to delineate individual differences in the basal levels of central and autonomic nervous system activity, and to establish their patterning over time; and (2) to ascertain and evaluate the co-variations of central and autonomic nervous system activity, as a function of spontaneous behavioral activity changes, reactivity to sensory stimulation, and reactivity to conditions of minimal and moderate stress.
Investigator(s): David H. Crowell, Ph.D., Pacific Biomedical Research Center 308, Department of Psychology, University of Hawaii, Honolulu, Hawaii 96822.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BA-8 SOME CORRELATES OF HEIGHT AND WEIGHT INCREMENTS AT EIGHT MONTHS

Purpose: To determine relationship between physical development at eight months as measured by height and weight increments, and the child's mental, fine motor, and gross motor development as measured by the Bayley scale.

Subjects: Babies tested at the Pennsylvania Hospital in Philadelphia within three days of their eight-month birthday. Subjects are drawn from those included in the NINDB Collaborative Project (see 19-AA-13); approximately 100 babies will be included.

Methods: Birth and growth measurements correlated with such factors as socio-economic status, sex, race, intelligence, fine and gross motor development, etc.

Duration: October 1964-spring 1965.

Investigator(s): Leila Padilla Otterman, Ph.D., Psychologist, Child Growth and Development Program, Children's Hospital of Philadelphia, Philadelphia, Pa.

Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Journal publication is planned.

19-BA-9 PSYCHOBIOLOGICAL AND SOCIOCULTURAL PROCESSES OF PUBERTY AND ADOLESCENCE

Purpose: To study interrelationships of biological, psychological, and socio-cultural factors during puberty and adolescence, and the significance of these interrelationships in the pattern of maturation of the total person.

Subjects: Approximately 5,000 children, age 8, will be followed through adolescence to obtain data descriptive and normative in nature. The group, about 12% Negro, will be evenly distributed by sexes.

Methods: Three levels of investigation are planned. The descriptive-normative studies will contain data collected from the entire sample and will be continuous research programs. Factors under investigation will include measurements of anatomical, physiological and biochemical aspects of growth and development plus concomitant measures of attitudes, feelings, personality dynamics, abilities, school performance, and many other psychological and social variables. A subsample of approximately 500 is planned for more extensive investigations by individual researchers, and will provide a pool of subjects to be studied both longitudinally and cross-sectionally. The third level will involve systematic subsampling from the total pool of subjects for shorter term, in-depth investigations by individual researchers. Specific variables under investigation will be the prerogative of the investigator but will be designed in such a way that the findings can be generalized to the total sample.

Findings: A bibliography of abstracts of references to adolescence is near completion. It will contain an estimated 7000 entries gleaned from medical, psychological and sociocultural journals extending from the earliest reports through 1964.

Duration: July 1964-continuing.

Investigator(s): L. J. West, M.D., Professor and Head, and Marshall D. Schechter, M.D., Professor of Child Psychiatry, Department of Psychiatry, Neurology, and Behavioral Sciences, University of Oklahoma School of Medicine, Oklahoma City, Okla. 73105.

Cooperating group(s): Foundations Fund for Research in Psychiatry.

Publication: Plans for publication of the bibliography on adolescence have been begun and await adequate funding. Reports of pilot studies will be made available when completed. Reports of the research will be made public through journal articles and monographs.

19-BA-10 LONGITUDINAL STUDIES OF TWINS

Purpose: To determine hereditary factors in physical growth and in cognitive and personality variables.
Subjects: Approximately 100 pairs of twins seen since birth; about 200 pairs of high school-age twins (both samples still being added to).
Duration: 1959-continuing.
Investigator(s): Steven G. Vandenberg, Ph.D., Director, Child Development Unit, Department of Pediatrics, University of Louisville School of Medicine, Louisville, Ky.
Cooperating group(s): National Instutute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers in various scientific journals in press.

19-BA-11 DEVELOPMENT OF NEGRO AND WHITE INFANTS

Subjects: 120 full-term infants (60 Negro and 60 white), chosen by random selection from the Bureau of Vital Statistics of Tallahassee, Florida.
Methods: Subjects will be tested on the Gesell Developmental Test at 12, 24, and 60 weeks. Either the developmental quotient (D.Q.) or total number of items passed at the chronological age level being tested plus items passed at a higher age level (whichever is more definitive) will be determined for each of the four test categories and at each age level. The Mann-Whitney U test will be used to compare the Negro and white infants at each age level and on the four categories being tested. Since birth weight has been shown to be a significant factor in development, data will be analyzed by controlling weight.
Duration: January-April 1965.
Investigator(s): C. Etta Walters, Ph.D., Associate Professor, Institute of Human Development, Florida State University, Tallahassee, Fla.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BA-12 ELECTROENCEPHALOGRAPHIC STUDIES IN NEWBORN AND YOUNG INFANTS

Purpose: Specific aims are the maturation appraisal of newborns by electroencephalographic methods and correlation with subsequent physical and mental development, under normal and abnormal conditions.
Subjects: Neonates drawn from NINDB Collaborative Project (see 19-AA-13) plus prematures and infants of multiple births, born at University of Oregon Medical School.
Methods: Newborn electroencephalography, including latency measurements in response to photic and acoustic stimulation. A Computer of Average Transients is used to measure the latency periods at different conceptual ages. Follow-up by electroencephalographic methods and psychological testing at age eight months, four years, and seven years.
Findings: In premature infants the evoked responses in the occipital area appeared with considerably longer latency than seen in normal, full-term infants. Post-mature infants tended to have shorter latency periods. Many prematurely born infants failed to show the shorter response latency found in full-term infants when they reached a conceptual age of 39 or 40 weeks. Female neonates showed a slight, but significantly shorter latency period than males. There was a consistent difference between white and Negro infants. Negro infants showed a greater responsiveness as expressed by photic latency measurements shortly after birth.

Duration: January 1961-December 1966.
Investigator(s): Rudolf C. H. Engel, M.D., M.Sc., Associate Professor of Pediatrics, University of Oregon Medical School, Portland 1, Oreg.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: "Maturational Changes and Abnormalities in the Newborn Electroencephalogram," *Developmental Medicine and Child Neurology*, August 1965.

19-BA-13 ADULT HEALTH RELATED TO CHILD HEALTH AND DEVELOPMENT

Purpose: To determine extent to which certain characteristics of young adults, around age 30, can be predicted from a knowledge of their patterns of health and development during childhood.
Subjects: 134 individuals who were enrolled in the Longitudinal Study of Child Health and Development conducted by Dr. Harold C. Stuart at the Harvard School of Public Health. These individuals were followed periodically from birth to 18 years and have reached the age period of 25 to 34 years.
Methods: Investigation of current medical examination data, health histories, and social data in relation to detailed longitudinal data.
Duration: June 1964-May 1968.
Investigator(s): Isabelle Valadian, M.D., Assistant Professor of Maternal and Child Health, and Robert B. Reed, Ph.D., Professor and Head, Department of Biostatistics, School of Public Health, Harvard University, 55 Shattuck St., Boston 15, Mass.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publications planned in 1968.

19-BA-14 A TEN-YEAR FOLLOW-UP OF LOW BIRTH WEIGHT INFANTS

Purpose: To assess the adjustment of low birth weight infants at 10 years of age with reference to: (1) school performance and special abilities (e.g., music), with confirmation by intelligence testing; (2) home environment and social contacts; and (3) athletic pursuits. Minor purposes include study of causation of premature delivery and disease susceptibility in low birth weight children.
Subjects: 45 infants of birth weight 2,500 grams or less, born at University Hospital, Edmonton in 1953-1954.
Methods: Study of various parameters of intelligence and developmental quotients (norms for school children in city already known for all ages); socio-economic and educational history obtained from parents; complete medical history of mother and child; genetic history; complete physical examination of child with measurements and photographs.
Findings: Tentative--(1) I.Q's and D.Q's of low birth weight infants not significantly different from norms; (2) all 45 children in appropriate school grade; (3) parental drive and economic well-being are a potent force for full development of child; and (4) major physical anomaly is myopia.
Duration: January-November 1964.
Investigator(s): David Bell, B.A. (Ed.), Post Graduate Student, Faculty of Education; W. C. Taylor, M.B., Ch.B., F.R.C.P.(C), Associate Professor of Pediatrics, and E. Salter, M.D., Resident in Pediatrics, University of Alberta, Edmonton, Alta.
Publication: Publication is planned.

19-BA-15 EFFECTS OF HANDLING ON THE PHYSICAL AND BEHAVIORAL DEVELOPMENT OF PREMATURE INFANTS

Purpose: To investigate effects of handling, beyond that which is typical in the care of prematures, on a variety of behavioral and developmental indices. The dependent variables to be studied are activity, weight, temperature, response to startle, feeding behavior, sucking behavior, and frequency of urination and defecation.
Subjects: Twenty white premature infants, 10 boys and 10 girls, each having a birth weight between 1190 and 1590 grams and a gestational age of less than 37 weeks.
Methods: The control Ss (5 boys and 5 girls) will be treated in manner customarily employed in the care of premature infants. Handling of these infants will take place at three-hour intervals and only in association with the feeding process. Each experimental S (5 boys and 5 girls) will be handled in his isolette for five minutes each hour during a 24-hour day, for a period of 10 days. With the same methods used to produce a burp, nurses assigned to the project will accomplish the handling through gentle rubbing of the infant's back, neck and arms. After the 10-day experimental period, and until discharge from the nursery, infants in the experimental group will be treated in the same manner as were the control infants.
Duration: July-October 1965 (pilot phase).
Investigator(s): Norman Solkoff, Ph.D., Assistant Professor of Psychology, Department of Psychiatry; David M. Weintraub, M.D., Assistant Clinical Professor of Pediatrics; and Sumner Yaffe, M.D., Associate Professor of Pediatrics, State University of New York at Buffalo, Buffalo, N. Y. (Reported by S. Mouchly Small, M.D., Professor and Chairman, Department of Psychiatry, State University of New York at Buffalo.)
Cooperating group(s): Childrens Hospital, Buffalo.
Publication: It is expected that some aspect of this pilot work will be published in either *Child Development* or *Pediatrics*.

19-BA-16 PHYSICAL, SOCIAL, AND EMOTIONAL DISORDERS FOLLOWING FAILURE TO THRIVE

Purpose: Growth failure in children, known as the failure-to-thrive syndrome, is a disorder of multiple etiology defined by marked retardation of growth in height and weight. A study was conducted on a group of children with growth retardation and failure to thrive associated with maternal deprivation and disturbance in the mother-child relationship. Purpose was to determine: (1) sequelae--physical, emotional, and social--that follow the acute phase of this disorder; (2) associations existing between these sequelae, external family stresses, and maternal characteristics at the time of full development of the syndrome; and (3) gaps in current management of the disorder.
Subjects: From a survey of hospital records of children admitted to the Boston Children's Hospital Medical Center between 1958 and 1964, 40 cases of failure to thrive not due to organic pathology were selected for study.
Methods: Medical records were reviewed to obtain all relevant medical, social, and psychological data. Social agencies were contacted to determine effectiveness of medical and social service recommendations at time of discharge, and to assess subsequent family adjustment. Direct patient and family material was obtained during follow-up visits to the Child Development Clinic and through home visits. Data were analyzed both quantitatively and qualitatively.
Findings: Significant physical, psychological, and social disorders followed the acute phase of this syndrome. These included marked retardation of physical growth and development, evidence of intellectual impairment, early disorder of character development, and family social disintegration. Mothers of these children represented a wide spectrum of psychological

disorders, and could not easily be described by a single formulation. The critical issue of decision-making in management and placement of these children demands: (1) establishment of more stringent medical and social diagnostic criteria; (2) more decisive action by social agencies; (3) wider interpretation of existing laws related to child care and protection; and (4) development of more realistic cultural attitudes regarding rights of infants and children.
Investigator(s): Helen H. Glaser, M.D.; Dexter M. Bullard, Jr., M.D.; Elizabeth C. Pivchek, M.S.W.; and Margaret Heagarty, M.D., Children's Hospital Medical Center, Boston, Mass.

19-BA-17 THE WORLD OF THE INFANT WHO FAILS TO GROW

Purpose: To study: (1) infants who are grossly undernourished and underweight but have no physical or physiological abnormalities; (2) emotional, developmental, and intellectual level of these infants and their course in the hospital; (3) family constellation in which these infants live (including the physical environment, the mother or mother surrogate, the father if present, and other significant adults and children in the home); and (4) nature of the community, various agencies in the community, and conditions that allow an infant to arrive at this state.
Subjects: Infants and young children whose weight is markedly below that expected for their chronological age. All physical and laboratory studies are negative as to the cause of the low weight. These subjects frequently show marked improvement when hospitalized over a period of time.
Methods: Detailed and extensive exploration of each family and child through home interviews, psychiatric social work investigation, psychological and psychiatric examination of subjects and their families, and examination of hospital and community agency records.
Duration: 1964-continuing.
Investigator(s): Joseph Fischhoff, M.D., Assistant Professor of Child Psychiatry, School of Medicine, Wayne State University, and Attending Physician, Children's Hospital of Michigan; David Faigenbaum, Ph.D., Assistant Professor, Departments of Pediatrics and Psychology, Wayne State University; and Harold Weiss, M.S.W., Psychiatric Social Worker, Children's Hospital of Michigan, Detroit, Mich.
Cooperating group(s): Community agencies and resources in the Detroit metropolitan area.

19-BA-18 CONTROLLED TEN-YEAR FOLLOW-UP STUDY OF SMALL PREMATURES

Subjects: All surviving prematures born at the Chicago Lying-In Hospital with weights of less than 1500 grams are being traced and re-examined 10 years after delivery. Paired term control infants matched with respect to sex, race, date of conception, route of delivery, primigravidity, multiplicity of birth, and socio-economic status are being examined in identical fashion.
Methods: Examinations include physical, neurological, audiometric, ophthalmologic, psychometric, and social evaluation. If statistically significant differences in the degree of handicapping are found, a search for correlating antenatal, paranatal, and postnatal factors will be made.
Investigator(s): Francis Howell Wright, M.D., Professor of Pediatrics; Robert Y. Moore, Assistant Professor of Medicine; and Ralph Naunton, Associate Professor of Otolaryngology, School of Medicine, University of Chicago, 950 E. 59th St., Chicago, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

Physical

19-BD-1 EVALUATION OF PHYSICAL FITNESS LEVELS OF CHILDREN

Subjects: 425 students and 67 adults from Oklahoma City, Oklahoma and Searcy and Bald Knob, Arkansas, tested during period September 1, 1962 through December 31, 1963.
Methods: (1) Extensive physical examination; (2) measurement of maximum working capacity on a treadmill, incorporating before and after blood analyses, analysis of expired air and other cardiovascular measures, and continuous measures of pulse rate, blood pressure, ventilation, and performance of heart muscle; and (3) administration of test described by American Association for Health, Physical Education, and Recreation in its *Youth Fitness Test Manual*. Percentile scores from this test are ranked against national norm and results compared with the scientific evaluation.
Duration: September 1962-July 1966.
Investigator(s): Robert T. Clark, Ph.D., Vice President for Research; Clark Stevens, Ph.D., Professor of Biology; Harry D. Olree, Ed.D., Professor and Chairman, Department of Health and Physical Education, Harding College, Searcy, Ark.; and Harris D. Riley, Jr., M.D., Professor and Chairman, Department of Pediatrics, School of Medicine, University of Oklahoma, Oklahoma City, Okla.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BD-2 CLINICAL AND EXPERIMENTAL STUDIES OF HUMAN OBESITY

Purpose: To study effect upon obese and anorexic persons of their experience of "hunger" and the effectiveness of their regulation of food intake; also to follow up previous findings, discordant with most others in the literature, that obese preadolescent girls in a summer camp are just as active as nonobese girls.
Subjects: Obese preadolescent girls, with matched nonobese controls, from an unselected school population.
Methods: Techniques which have been developed to teach persons to become aware of their gastric motility will be applied to subjects. Mechanical pedometers will be used to compare physical activity of subjects with that of controls.
Duration: 1965-1970.
Investigator(s): Albert J. Stunkard, M.D., Professor of Psychiatry, and Mary E. Moore, Ph.D., Associate in Psychology in Psychiatry, School of Medicine, University of Pennsylvania, Philadelphia, Pa. 19104.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BD-3 TASTE DISCRIMINATION IN CHILDREN

Purpose: Taste abilities of children are measured to formulate a theoretical approach to taste, and to compare to that of electrophysiology with animals.
Subjects: Children between the ages of 4 and 14.

Methods: Absolute threshold and just noticeable differences will be measured by three different methods commonly employed in the literature.
Duration: September 1963-December 1966.
Investigator(s): Lloyd M. Beidler, Ph.D., Professor of Physiology, Department of Biological Sciences, Florida State University, Tallahassee, Fla.
Cooperating group(s): National Science Foundation.
Publication: Publication will be made in a suitable journal in 1966.

19-BD-4 A SURVEY AND COMPARISON OF YOUTH FITNESS BETWEEN 1957 AND 1963

Purpose: To determine the present level of fitness of boys and girls based on a national sample.
Subjects: Approximately 9,000 boys and girls in grades 5 through 12 in public schools of the United States.
Methods: Administration of seven-item physical fitness test.
Duration: January 1964-November 1965.
Investigator(s): Paul A. Hunsicker, Ph.D., Chairman, Department of Physical Education, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report to be submitted to U. S. Office of Education; test data to be published by the American Association for Health, Physical Education and Recreation.

19-BD-5 THE SCRATCH OF THE NEWBORN

Purpose: To correlate neonatal scratching with paranatal history and yearly follow-ups including behavioral adjustment and psychosomatic disease.
Subjects: 28 neonates who scratched self; 28 neonates who did not.
Methods: Observation at day one and two; paranatal history; annual follow-ups; physical exam at one year; psychiatric evaluation at five years; I.Q. and other tests at five years.
Duration: 1962-1970.
Investigator(s): C. E. Schorer, M.D., Staff Psychiatrist, Lafayette Clinic, 951 E. Lafayette, Detroit, Mich. 48207.

19-BD-6 STUDY OF LATENCY TIMES AND CHARACTERISTICS OF EVOKED CRY RESPONSES IN INFANTS

Purpose: To determine if the latency time and physical characteristics of evoked cry responses in early infancy can be a useful indicator of neurological function and subsequent development.
Methods: Methods are being developed for harmless electrical and tactile stimulation, tape recording of evoked cry responses and conversion of responses to visual graphic records. The latency determinations and analysis of cry characteristics will be made from the graphic records.
Duration: April 1965-continuing.
Investigator(s): Richard J. Schain, M.D., Associate Research Professor and Research Scientist in Pediatric Neurology; and John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief of Communicative Disorders Division, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-BD-7 RELATIONSHIPS BETWEEN EARLY GESELL DEVELOPMENTAL SCHEDULE QUOTIENTS AND LATER PERCEPTUAL-MOTOR PERFORMANCE

Purpose: To determine degree and nature of relationship between scores made by children in infancy and early childhood on the Gesell Developmental Schedules and the scores made by the same children at ages four to eight years on tests of perceptual-motor function.
Subjects: 92 children who had been administered the Gesell Schedule at a mean age of 57 weeks.
Methods: At a mean age of 70 months, subjects were administered a battery of tests of visual, tactile, and kinesthetic perception and motor planning and execution. Resultant scores were compared with early developmental quotients by computing Pearson product-moment correlations. Significance of difference between mean perceptual scores of children scoring above versus below the mean on the Gesell test was tested with t- ratios.
Findings: All perceptual-motor tests significantly discriminated between the high and low developmental quotient groups. All correlations between individual perceptual-motor tests and the Gesell quotients were significant, most of them being in the .40's and .50's. Using stepwise multiple regression, an R of .75 was obtained between the total test battery and the Gesell scores.
Duration: August 1964-August 1965.
Investigator(s): A. Jean Ayres, Ph.D., Post-doctoral Trainee; Arthur H. Parmelee, Jr., M.D., Department of Pediatrics, University of California; and Miriam C. Wilson, M.D., Crippled Children's Services of Los Angeles County, Los Angeles, Calif.
Publication: Publication is planned.

19-BD-8 PHYSICAL GROWTH AND DEVELOPMENT IN JAPANESE-BRAZILIAN CHILDREN

Purpose: Comparison of growth of Brazilian children of Japanese parents with that of Japanese children in Japan considering: health status, changing food habits, nutrition, economic level, and climate, in order to weigh the value of biological, ecological, and socio-cultural factors upon growth.
Subjects: Japanese-Brazilian children, ages 6 to 12 years, in the State of Sao Paulo, Brazil of Japanese parents; a smaller sample of children with only one Japanese parent.
Methods: Medical and dental examinations, laboratory analysis of blood and stools, nutritional analysis of diets, sociological questionnaires of family life and food habits, anthropometry, eruption of permanent dentition, menarche. Growth treated cross-sectionally and longitudinally for stature, weight, and sitting height.
Findings: Preliminary findings indicate slight advantage in height of Brazilian-born Japanese, greater length of lower limbs compared to total height of Brazilian-born Japanese, and that California-born Japanese studied by Greulich (*American Journal of Physiology and Anthropology* 15:489-516, 1957) are larger and heavier than Brazilian-born Japanese.
Duration: 1962-1967.
Investigator(s): Irma M. Amelia Guaraciaba, Chairman, Department of Anthropology and Biology, Fac. de Filosofia, Ciencas, e Letras, S. Coracao de Jesus Bauru, Sao Paulo, Brazil.
Cooperating group(s): Fundacao de Amparo a Pesquisa de Estado de Sao Paulo.
Publication: Two articles in press in the *Anais do Museu Paulista* and *Educacao e Ciencas Sociais*; report of health to be published in the *Revista Paulista de Medicina*--all in Portuguese.

19-BD-9 AGE AND SEX DIFFERENCES IN PERCEPTUAL LATERALITY

Purpose: To assess the effects of age, sex, and handedness on certain laterality effects in perceptual tasks.
Subjects: Left- and right-handed male and female subjects, between the ages of 8 and 21 years.
Methods: Subjects will be tested for lateral differences in a visual perceptual task. In addition, older subjects will be tested for analogous differences in a dichotic listening situation. Visual data will be the frequency of fragmentation of low intensity stimuli in the left and right visual field. Auditory data will be the percentage of digits correctly perceived from the left vs. right ear, when the digits to the two ears are presented simultaneously. These data will be analyzed to reveal any relation between laterality effects in the two perceptual areas, as well as their relation to handedness. Further, any concordance between visual, auditory, and motor aspects of laterality will be analyzed for its relation to age and sex.
Duration: 1964-1965.
Investigator(s): John Paul McKinney, Ph.D., Assistant Professor, Department of Psychology, Smith College, Northampton, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BD-10 RELATIONSHIPS BETWEEN PHYSICAL PERFORMANCE OF SCHOOL-AGE CHILDREN AND THEIR AGES, HEIGHTS, AND WEIGHTS

Purpose: To determine the suitability of nonlinear functions for expressing relationships between the physical performance of school-age children on the AAHPER Youth Fitness Test and the children's ages, heights, and weights; to develop a multiple, nonlinear, regression of physical performance scores on the independent variates of age, height, and weight; to prepare, from the coefficients of the multiple, nonlinear regressions, a new Classification Index in tabular or graphic form, for use in evaluating pupils' performances on the AAHPER Youth Fitness Test; and to determine the feasibility of combining the item scores on the test into a composite score which would represent the relative, overall fitness of a school youth.
Subjects: 28,000 school children in grades 4 through 12, enrolled in 100 school districts randomly selected from the 450 Minnesota graded elementary and secondary public school systems.
Methods: Develop hypotheses concerning the nature of the relationships through graphic analysis; test derived hypotheses by comparing the effectiveness of any resulting nonlinear regression equations with that of linear equations using the least-squares technique; derive new Classification Indices from the regression coefficients of any significantly superior nonlinear regression equation; develop tabular and/or graphic methods for interpreting children's performances on the AAHPER Test; and analyze distributions of various composite scores developed for the AAHPER Test.
Findings: The standards or norms by which pupil performances scores on the AAHPER Youth Fitness Test are evaluated should take into account the age, height, and weight of the pupils. Norm tables for the five physical performances were prepared using the most effective multiple nonlinear regression equations. It was possible to develop a composite score in which the scores of the five performances were combined. A computer program for scoring and interpreting pupil performances scores on the AAHPER Youth Fitness Test was devised.
Duration: November 1962-August 1965.
Investigator(s): John E. Bicknell, Director of Research; Carl Knutson, Director of Physical Education, Minnesota State Department of Education, St. Paul; Marjorie Wilson, Professor of Physical Education, University of

Minnesota, Minneapolis; and Clem W. Thompson, Ph.D., Professor of Physical Education, Mankato State College, Mankato, Minn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-BD-11 BEHAVIORAL OBSERVATIONS ON HYPERKINETIC AND NORMAL CHILDREN

Purpose: A pilot study to evaluate effect of environmental stimulation on behavior; to differentiate between two types of hyperkinetic children--those who are hyper-responsive to environmental cues and those who appear to be "internally driven;" and to see if these two types of disturbances respond differentially to pharmacotherapy.
Subjects: 12 to 20 children diagnosed as hyperkinetic and in the 7 to 9 year age range; 12 to 20 normal controls.
Methods: Behavioral observations of children will be made under a number of experimental conditions. The major variable will be their performance on simple tasks with an observer present or by themselves. Observations are recorded on an event recorder.
Duration: July-September 1965.
Investigator(s): John A. Stern, Ph.D., Professor, and M. A. Steward, M.D., Assistant Professor, Department of Psychiatry, Washington University School of Medicine, St. Louis, Mo. 63104.

19-BD-12 A DEVELOPMENTAL STUDY OF PERCEPTUAL, CONCEPTUAL, MOTIVATIONAL, AND SELF-CONCEPT DIFFERENCES BETWEEN AND WITHIN HYPERACTIVE AND NORMAL GROUPS OF PREADOLESCENT BOYS

Purpose: To ascertain factors which characterize preadolescent boys seen as hyperactive by their teachers, when compared to nonhyperactive controls; to develop methods for educationally meaningful subclassification of these hyperactive boys; to provide the basis for a longitudinal study; and to develop procedures which suggest special educational programs based on learning deficits and assets rather than etiological or diagnostic labels.
Subjects: 270 boys in grades 1 through 5 of the Kingston, N. Y. school system, half of whom have been rated by their teachers as exceptionally hyperactive, distractible, impulsive, unpredictable and explosive.
Methods: Experimental and control groups will be compared on a large battery of tests including the WISC, the ITPA, the Indiana Neuropsychiatric Test Battery (after Halstead, Reitan and Reed), the Colvin Test of Self-Concept and Interpersonal Relations, two visual illusions, the SAET, two reversible figures, figure drawings, the Bender-Gestalt, and the Impulse Control Spiral. In addition, teachers' rankings and achievement test data will be procured from the school. Data analysis will include factor analysis, analysis of variance, and discriminant function analysis.
Duration: January 1965-December 1966.
Investigator(s): Raphael F. Simches, M.A., Chief, Bureau for Physically Handicapped Children, New York State Department of Education, Albany 1, N. Y. (Reported by Frank E. Clarkson, Ph.D., New York State Board of Regents Research Unit, School No. 5 Wynkoop Place, Kingston, N. Y.)
Cooperating group(s): Astor Home for Children; Kingston, New York School System; Board of Regents, N. Y. State Department of Education; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: A limited number of journal articles are planned, in addition to a final progress report.

19-BD-13 PHYSIOLOGIC STATES IN THE NEONATAL PERIOD

Subjects: Normal and abnormal babies (the latter group including both babies with depression of the functions of the central nervous system and those with convulsions or hyperactivity in response to mild stimuli) will be studied during the first five days of life, or through later age if abnormal.
Methods: Studies include 24-hour recordings of the baby's spontaneous activity on a specially constructed recording bed which will give a record of, not only the total amount of activity, but its distribution in time, including any tendencies to cyclic activity. Activity evoked by light, touch, and sound will also be recorded and the evoked potentials in EEG will be studied in response to the same stimuli. Infants will be examined neurologically by standard methods according to current practice, including some developed by the principal investigator. Possible chemical correlation, including the levels of glucose, calcium, phosphorus in the blood and transaminase in the cerebrospinal fluid will be checked. It is planned to re-examine abnormal infants at yearly intervals to determine their subsequent status, and psychometric testing will ultimately be carried out as well. Subsequent status of presumed normal newborns will also be verified either by report of a pediatrician of known competence or by re-examination by one of the project staff.
Investigator(s): Richmond S. Paine, M.D., Neurologist; Gerald Fenichel, M.D., Associate Neurologist; Marion Miles, M.R.C.P.E., Research Fellow in Neurology, Department of Neurology and Neurosurgery, Children's Hospital of D. C.; Artemis Simopoulos, M.D., Assistant Professor of Pediatrics, George Washington University School of Medicine, Washington, D. C.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BD-14 THE DEVELOPMENT OF THE CONTROL OF ACCOMMODATION

Purpose: To determine at what age level competence in the control of focus of the eye is obtained.
Subjects: School children and young adults in Bloomington, Indiana.
Methods: Special equipment has had to be built and tested, using infrared light for monitoring accommodation.
Findings: No results as yet on children. Young adults show varying sophistication in control of focus, but in general, the control is poor.
Duration: 1958-1965.
Investigator(s): Merrill J. Allen, Ph.D., Professor of Optometry, Indiana University, Bloomington, Ind.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: American Journal of Optometry 37:8:403-407, August 1960.

19-BD-15 FEEDBACK OF INFANT'S BABY BABBLE

Purpose: To determine if infants vocalize more if stimulated by a delayed feedback of their own vocalizations.
Subjects: 20 infants, 8 to 11 months, either male or female; and 20 children, 14 months, male or female.
Methods: A Bell Telephone Delay Unit and an Ampex 620 Amplifier Speaker System are employed to record fifteen minutes of undelayed vocalizations

and fifteen minutes of delayed vocalization. Duration of vocalizations for each condition will be measured on the power level recorder. Findings: Subjective observation suggests that babies respond to feedback of their own vocalizations by an increase in the duration of their vocalizations. Female babies may vocalize more at an earlier age. Investigator(s): Sheila Morrison Goff, Associate Professor of Speech, Ohio State University, Columbus, Ohio 43210.

19-BG-1 NUTRITIONAL STATUS OF PRESCHOOL CHILDREN IN HUAY KWANG

Subjects: Mothers and their children in Huay Kwang Government Housing Project, Bangkok.
Methods: Physical examination of the preschool children as well as biochemical analysis of blood and urine.
Duration: November 1964-1965.
Investigator(s): Srisomang Keovichit, M.D., M.P.H., M.S., Lecturer, Faculty of Public Health, University of Medical Sciences, Bangkok, Thailand.
Cooperating group(s): Department of Nutrition and Department of Biostatistics, University of Medical Sciences.

19-BJ-1 A STUDY OF VARIOUS TREATMENTS OF THUMB AND FINGER SUCKING AND THEIR PSYCHOLOGICAL AND DENTAL EFFECTS

Purpose: To evaluate the dental crib as a treatment for the thumbsucking habit, and to determine if other treatments (both dental and psychological) can break the habit. Also to determine whether there is any personality or family background characteristic contributing to the thumbsucking habit.
Subjects: 66 children between the ages of 4 and 12 who have sucked their thumbs to the extent that they have affected their oral structures.
Methods: Sample was randomly divided into 6 treatment groups and treated for one year. Psychological treatment was of a supportive nature such as a dentist could perform in his office.
Findings: The palatal crib was significantly superior to all other treatments in breaking the habit.
Duration: May 1964-March 1967.
Investigator(s): R. D. Haryett, D.D.S., Sc.D., Associate Professor and Head, Department of Orthodontics, University of Alberta, Edmonton, Alta. (Reported by Mark L. Sandilands, Department of Psychology, University of Alberta.)
Cooperating group(s): Department of National Health and Welfare of Canada.
Publication: To be submitted to Canadian Dental Journal.

19-BM-1 MOTOR OVERFLOW PHENOMENA IN NORMAL AND BRAIN-INJURED CHILDREN

Purpose: To determine developmental patterns of motor inhibition, and to evaluate patterns in children with cerebral dysfunction.
Subjects: 40 normal and brain-injured children in each yearly age group from 6 to 14 years.
Methods: Formally recording observations on contralateral overflow and inhibitions when subject is asked to imitate rapid alternating movements of fingers, arms, and legs or to press dynamometer at specific pressure range. Standard checks for inter- and intra-observer reliability.
Duration: March-December 1965.

Investigator(s): Lawrence T. Taft, M.D., Associate Professor of Pediatrics and Rehabilitation Medicine, Albert Einstein College of Medicine, Yeshiva University, Bronx 61, N. Y.
Publication: To be submitted to Journal of Developmental Medicine and Child Neurology.

19-BM-2 RESPONSE SPEED AS A FUNCTION OF AGE, INCENTIVE VALUE, AND REINFORCEMENT SCHEDULE

Purpose: To take a theory of frustration, developed to explain the behavior of rats in runways, beyond its initial and boundary conditions and see the extent to which it can account for the behavior of more complex organisms. Composition laws will be added to the theory if, and when, necessary.
Subjects: One study employed 100 kindergarten children. A second study used 36 preschool and 36 kindergarten subjects.
Methods: Instrumental lever pulling response with measures of starting and movement time.
Findings: Subjects on a 50% reinforcement schedule demonstrate faster response speeds than subjects continually reinforced (100%). There was evidence on one of the measures that the superiority of the partially reinforced group develops more slowly in younger subjects. The incentive value variable yielded unexpected results in that faster speeds were portrayed by the low rather than high incentive subjects.
Duration: 1963-1965.
Investigator(s): Thomas J. Ryan, Ph.D., Assistant Professor of Psychology, University of Western Ontario, London, Ont.
Cooperating group(s): University of Western Ontario; London Board of Education; London Preschool Association.

Perceptual

19-BP-1 JUDGMENT DRIFT AS A FUNCTION OF AGE AND I.Q.

Purpose: To determine the effect of repeated estimates on children's reproductions of time intervals and drawn lines.
Subjects: A total of 64 subjects, 8 males and 8 females in each of grades 2, 4, 6, and 8, will be used.
Methods: Each child will be asked to give 10 successive reproductions of a five-second interval and 10 successive reproductions of a three-inch line. The data will be analyzed to determine whether children, like adults, show a tendency to make longer and longer reproductions on successive trials (judgment drift) and whether, controlling for I.Q., a developmental trend appears within this age range.
Duration: October 1964-June 1965.
Investigator(s): Helen White, Ph.D., Senior Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Publication: Data will be included in a symposium presentation on Human Time Structure given at the 1965 American Psychological Association meetings and also published in full, possibly in Perceptual and Motor Skills.

19-BP-2 PERCEPTUAL DEVELOPMENT IV: ONTOGENETIC INFLUENCE ON THE EFFECT OF FIXATION UPON PERCEIVED DISTANCE

Purpose: To account for the developmental growth of overconstancy of distance judgments within the framework of sensorytonic theory.
Subjects: 48 pupils of a public school, aged 7 to 10 years, in groups of 12 at each age level. All have 20/20 uncorrected vision as measured on a Cohen Chart.
Methods: A modified Howard-Dolman apparatus is attached to a binocular viewing box with a black, enclosed viewing tunnel. A fixation dot is between the two rods at a distance of two meters from the eyes. The subject adjusts the right hand rod so that it appears to be at the same distance as the left hand rod. Subject then fixates the dot for 60 seconds with only the latter rod in view. Immediately following fixation subject again adjusts the right hand rod. The pretest and post-test difference is taken as after-effect of fixation.
Duration: February 1964-December 1965.
Investigator(s): Robert H. Pollack, Ph.D., Deputy Director of Research, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication is planned.

19-BP-3 THE ASSESSMENT OF SHAPE PREFERENCES IN HUMAN INFANTS

Purpose: To determine, by the use of the method of preference as indicated by time of visual fixation, the specific dimensions underlying shape preferences in young human infants as well as the preferential ordering (and discrimination) of colors; and to investigate the relative dominance of shape or color as reflected in the preferential ordering of responses to stimuli varying in both characteristics.
Subjects: Groups of four-month old infants.
Methods: Each of several groups of subjects will view a different stimulus series, the stimuli being presented according to method of pair comparisons. Stimuli of a given set will vary in some aspect of shape or color or in both dimensions. Direct observation and immediate recording of responses will be used with suitable procedural controls.
Investigator(s): William C. Spears, Ph.D., Assistant Professor of Psychology, Queen's University, Kingston, Ont.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BP-4 PSYCHOPHYSICS OF THE DEVELOPMENT OF FORM PERCEPTION

Purpose: Application of multidimensional psychophysics to the ontogenetic development of form perception and perceptual classification of complex stimuli. Attempt will be made to specify systematic developmental changes in use of different stimulus dimensions to achieve form perception.
Subjects: Human subjects, beginning at age 2.
Methods: Psychophysics: absolute judgments and method of the standard. Use of long series of stimuli systematically varying along several dimensions. Task: classify stimuli under two mutually exclusive categories, i.e., complex and simple. Data analyzed partly by Linear Discrim-

inant Function.
Findings: Few systematic differences with age. Between ages 6 and 15, perceptual system appears remarkably stable.
Duration: June 1965-June 1968.
Investigator(s): Albert S. Rodwan, Ph.D., Assistant Professor of Psychology, and Bernhard Kempler, Ph.D., Assistant Professor, Emory University, Atlanta 22, Ga.
Cooperating group(s): Various public school systems in the Atlanta area; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper read at Southeastern Psychological Association Convention, Atlanta, 1965. Other reports to be published in psychological journals.

19-BP-5 PERCEPTION OF MOVEMENT BY INFANTS

Purpose: To obtain data on infants' visual fixation preferences for checkerboard stimuli varying in speed of movement and in complexity.
Subjects: Infants between 7 and 24 weeks of age, voluntarily brought to laboratory by their parents.
Methods: Subject is shown two identical checkerboard stimuli, one stationary and one which moves at speeds varying from .4 inches per sec. to 2.5 inches per sec. on different trials. Record is kept of the infant's looking time for each stimulus. Size of squares in checkerboards is also varied, and each level of complexity thus constituted is shown at the different speeds.
Findings: All age groups (7, 11, 16, 20, and 24 weeks) increase looking time with increased speed of movement. The slowest speed responded to is slower with older age groups. Complexity of stimulus affects results, but in ways not completely specified yet.
Duration: April 1963-1966.
Investigator(s): Elinor Wardwell Ames, Ph.D., Assistant Professor of Psychology, Simon Fraser University, Burnaby, B. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal publication planned later. Data will first be available through Silfen, Carole K., Ph.D. thesis, McMaster University, 1966.

19-BP-6 CHILDREN'S PERCEPTUAL DISCRIMINATION IN THE COLOR AND FORM DIMENSIONS

Purpose: To test the perceptual abilities of children.
Subjects: 6- and 10-year old normal children.
Methods: Oddity and matrix problems in the color and form dimensions.
Duration: January 1965-January 1967.
Investigator(s): Rosslyn Gaines Suchman, Ph.D., Associate Research Professor, Office of Psychological Research, Gallaudet College, Washington, D. C. 20002.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Communication

19-BU-1 ON PERCEPTION OF NONVERBAL PROPERTIES OF SPEECH

Purpose: It is quite possible that members of "disturbed" families learn idiosyncratic meaning attached to the nonverbal properties of speech at the cost of conventional meaning. The present study is a pilot investigation to establish a normative tool for the measurement of nonverbal properties of speech; and to make developmental comparisons.
Subjects: Four groups of children, ages 8, 10, 12, and 18.
Methods: One word ("please") will be tape recorded with many different connotations. Norms for these connotations will be established by judges on an objective basis (multiple choice scales). "Correctly" identified items on the test present normative conventional interpretation. Test will be presented to subjects, and differences in abilities to interpret nonverbal properties of language will be analyzed. Additionally the test will be presented to "disturbed" individuals and family groups to assess if such a normative tool would identify disturbances in communication. Both encoding and decoding processes will be studied.
Investigator(s): Ernst G. Beier, Ph.D., Professor of Psychology, University of Utah, Salt Lake City, Utah.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BU-2 VERBAL COMMUNICATION PROCESSES IN CHILDREN

Purpose: To develop methods for studying, and to investigate the development of linguistic and metalinguistic communication skills.
Subjects: 26 nursery school students, ages 33-63 months, and 156 grammar school students, grades kindergarten-ninth.
Methods: A game is employed which requires that pairs of subjects communicate about a set of novel referents (ambiguous graphic designs). It allows assessment of subject's behavior as speaker or listener or as member of dyad. Data is obtained from a content analysis of verbatim transcripts.
Findings: Nursery school children are unable to develop a standardized interpersonal nomenclature for novel referents, although they can communicate adequately about nominate objects, can receive adult messages and encode intrapersonally.
Duration: December 1964-not reported.
Investigator(s): Robert M. Krauss, Ph.D., Bell Telephone Laboratories, Murray Hill; and Sam Glucksberg, Ph.D., Assistant Professor, Princeton University, Princeton, N. J.
Publication: Submitted to Child Development; paper prepared to be read in symposium at 1965 American Psychological Association meetings.

19-BU-3 THE DEVELOPMENT OF LANGUAGE FUNCTIONS

Purpose: To study the acquisition of language during childhood and changes during the entire life span; and to study cognitive aspects of language development.
Subjects: Various samples of children and adults.
Methods: Experimental techniques, discrimination tasks, recognition tasks,

concept formation tasks, word associations, speech samples, performance tasks, computers, and computers for simulation purposes.
Duration: January 1965-August 1968.
Investigator(s): Klaus F. Riegel, Ph.D., Director; David Birch, Ph.D., Co-Director; and staff, Language Development Program, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Department of Psychology, Speech Clinic, and Mental Health Research Institute, University of Michigan; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-BU-4 THE CHILD'S ACQUISITION OF GRAMMAR

Purpose: To describe the acquisition of syntax as a succession of generative grammars.
Methods: Longitudinal study over a 3-year period. Weekly half-hour samples of child's speech and speech of parent to child. Analysis by methods of structural linguistics.
Duration: June 1963-May 1967.
Investigator(s): Roger Brown, Ph.D., Professor of Social Psychology, Department of Social Relations, Harvard University, Cambridge 38, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Harvard Educational Review, Spring 1964; Brown, R., Social Psychology, New York: Free Press, 1965.

Intellectual

19-CA-1 INFANT INTELLECT AND EXPERIENCE

Purpose: Validation of Piaget's theory, as corollary to the development of a scale of infant psychological development based on his principles and on empirical work.
Subjects: 84 1- to 24-month old babies in the last-tested group.
Methods: Observation.
Findings: Reliability of observers better than consistency of child over 48-hour period.
Duration: January 1964-December 1966.
Investigator(s): J. McVicker Hunt, Ph.D., Professor of Psychology, and Ina C. Uzgiris, Ph.D., Assistant Research Professor of Psychology, University of Illinois, Urbana, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers planned for publication 1965-1966.

19-CA-2 DIFFERENTIAL ABILITIES OF SIX-YEAR OLD CHILDREN

Purpose: The study is an attempt to explore the structure of ability of a group of six-year old children through the identification and measurement of five hypothesized ability domains: memory, cognition, convergent production, divergent production, and evaluation. One ability factor within each of the

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domains is hypothesized, viz., memory span, induction, visualization, originality, and figural identification.
Subjects: 100 children within three months of their sixth birthday.
Methods: Three tests of each hypothesized ability will be constructed and administered to subjects. Appropriate statistical procedures, including the extraction and rotation of the factors, will be performed.
Duration: January-December 1964.
Investigator(s): Russel E. Orpet, Ed.D., Associate Professor, California State College, 6101 East Seventh St., Long Beach, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-CD-1 ORDER EFFECTS IN STUDIES OF COGNITIVE OPERATIONS

Purpose: To ascertain whether the presentation of Piaget-type cognitive tasks in different orders, affects the results obtained; to investigate the relation among a number of Piaget tasks; and to see if there is a relation between cognitive development and social interaction.
Subjects: 96 children, 32 from each of 3 age groups (8, 9, 10) chosen randomly from the population of one elementary school.
Methods: Two kinds of tasks, conservation and transitivity (a relation is transitive if, when A is related to B and B to C, A is also related to C), presented in counterbalanced order to each subject; subjects are also given tasks involving moral judgment, class inclusion, and perspective (taking another's point of view); and at each age, pairs of subjects who are both high in cognitive development or both low, or one high and one low, are given a task where they must interact in order to solve the problem. The general design has also been repeated with adults.
Duration: September 1964-August 1965.
Investigator(s): Philip A. Cowan, Ph.D., Assistant Professor of Psychology, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: At least two papers are planned, probably to be submitted to Child Development.

19-CD-2 STUDIES OF VERBAL MEDIATION IN CHILDREN

Purpose: To test various ramifications of the "verbal mediational deficiency hypothesis" in particular, and to examine the verbal mediational process in general.
Subjects: Preschool and elementary school children.
Methods: Training is given in labeling; then testing is carried out to determine what influence this function has on the subject's overt behavior.
Findings: A study was completed which showed that children aged three to four were not deficient in their ability to utilize their own verbal labeling responses as cues for overt choice responses, as compared to children aged seven to eight.
Duration: September 1964-June 1966.
Investigator(s): Irwin William Silverman, Ph.D., Assistant Professor of Psychology, University of Waterloo, Waterloo, Ont.

19-CD-3 POTENCY OF MODELING CUES IN IMITATION AND VICARIOUS REINFORCEMENT SITUATIONS

Purpose: To determine if the effectiveness of a model can be manipulated by systematically varying the number and intensity of the stimuli presented by a model to an observer. It was predicted that increasing the diversity or number of modeling cues will enhance their salience, with resultant increments in the incidence of imitative responses.
Subjects: Two experiments were carried out with a total of 353 children from the first and third grades. Subjects were seen in groups of five same-sex, same-age peers.
Methods: Experiment I presented subjects with symbolic models who made choices on a pair of two-choice tasks. Subsequent to model exposure, children made choices on the same tasks. Model number was varied from one to five across groups. Control subjects made choices in the absence of a model. Experiment II provided treats as a reward for participation in the first experiment. Children were exposed to a peer model who made a choice between a novel and a popular drink, and was reinforced for his selection. Then subjects were given the choice. Control subjects saw a nonreinforced model, or performed without a model.
Findings: Experiment I: A significant positive correlation was obtained between number of models presented and frequency of matching responses.
Experiment II: Differences among experimental groups were minimal, but suggestive of some interesting age and sex relationships in the vicarious reinforcement situation.
Duration: September 1964-June 1965.
Investigator(s): Adrienne K. Barnwell, Ph.D. Candidate, Department of Psychology, Northwestern University, Evanston, Ill.
Publication: Dissertation Abstracts.

19-CD-4 EVENT-MATCHING

Purpose: Determination of differences among age, intelligence, and ethnic groups and of determinants in process of matching random and systematic events.
Subjects: White and Negro normals and mental retardates of varied age groups.
Methods: Program events on Posner 2-light box; subjects attempt to match, by anticipation method, which of the lights will appear next.
Findings: Initial results suggest slower matching but similar asymptote in mental retardates to that in normals (as in literature).
Duration: July 1964-1965.
Investigator(s): James A. Posner, Ph.D. Candidate, and Willard H. Nelson, Ph.D., Associate Professor of Psychology and Education, Florida State University, Tallahassee, Fla.

19-CD-5 EFFECTS OF CORRELATED REINFORCEMENT IN CHILDREN

Purpose: To determine the effects of correlated reinforcement on the performance of children; to devise a mathematical model which will adequately describe the above performance; and to determine what parameter, if any, is related to developmental level.
Subjects: Normal boys and girls, preschool, grades 1-12 and undergraduate college students.
Methods: Subjects turn a crank for five-second trials. The speed of crank-turning determines the occurrence of reward. Matched pairs of subjects are selected on the basis of preliminary trials. One of the pair (experimental)

will be rewarded for certain speed of crank-turning. The other subject (control) is rewarded in precisely the same way as was his experimental mate, i.e., his own speed does not affect his reward. A divergence between experimental and control speeds over trials indicates that the subjects are affected by the correllated condition. For adults the rewards are money. For children rewards are accummulated lights which are traded for pre-selected toys.

Findings: Sex and handedness do not interact with any of the learning measures at any developmental level; for a condition in which subjects must turn slowly, preschool and kindergarten subjects are not affected. Older subjects are affected but third graders learn with far less reward than older subjects.

Duration: September 1964-August 1967.

Investigator(s): Charles S. Feldstone, Ph.D., Assistant Professor of Psychology, University of Connecticut, Storrs, Conn.

Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: *Journal of Experimental Child Psychology*, in press. Additional similar publications are planned.

19-CG-1 EFFECTS OF DELAY OF REWARD AND DELAY OF PUNISHMENT ON CHILDREN'S LEARNING

Subjects: Kindergarten to high school age children.

Duration: 1964-not reported.

Investigator(s): Richard H. Walters, Ph.D., Professor and Chairman, Department of Psychology, University of Waterloo, Waterloo, Ont.

Cooperating group(s): National Research Council of Canada.

Publication: *Child Development* 35:275-280, 1964; *Psychonomic Science* 1:307-308, 1964.

19-CG-2 OBSERVATIONAL LEARNING IN SOCIAL SITUATIONS

Subjects: Kindergarten to high school age children.

Duration: 1963-not reported.

Investigator(s): Richard H. Walters, Ph.D., Professor and Chairman, Department of Psychology, University of Waterloo, Waterloo, Ont.

Cooperating group(s): Defense Research Board of Canada.

Publication: *Perceptual Motor Skills* 18:469-483, 1964; *Advances in Experimental Social Psychology* 1:231-276, 1964; *Journal of Experimental Child Psychology* 1:269-280, 1964 and in press; *Advances in Child Development and Behavior*, Vol. 2; New York: Academic Press, 1965.

19-CG-3 INTERSENSORY TRANSFER OF LEARNING IN YOUNG CHILDREN

Purpose: Studies have been done, using adult human subjects and animal subjects, indicating that controlled stimulation in a given sensory medium (visual, tactile, auditory, etc.) may result in improved performance in the solution of problems presented via other sensory modalities. The precise conditions under which the phenomenon may occur are not understood. The present study is proposed to determine the limits and efficiency of this phenomenon (intersensory facilitation of learning) with children.

Subjects: Children between the ages of 3 and 12. Control subjects of equivalent age and intelligence, but with different pretraining experience.

Methods: Through carefully controlled stimulation in given sensory modalities followed by examination of the subjects' performance on standardized tasks involving a different modality, it is intended to determine the significance of the pretraining experiences in facilitation of final task performance. Variations on well-known discrimination learning procedures will be employed.

Investigator(s): D. Bruce Gardner, Ph.D., Professor of Psychology; George Karas, Ph.D., Associate Professor of Psychology; and Leroy Wolins, Ph.D., Associate Professor of Psychology and Statistics, Iowa State University, Ames, Iowa.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-CG-4 THE EFFECTS OF RELATIVE "DEPRIVATION" OF AND "SATIATION" FOR A SOCIAL STIMULUS ON ITS SUBSEQUENT REINFORCING EFFECTIVENESS: A PILOT STUDY

Purpose: To vary the availability of a class of stimuli (e.g., the word "good") to subjects in the period immediately preceding a test, in order to determine whether such preconditions would qualify the reinforcer effectiveness (or saliency) of that stimulus class in subsequent performance and learning.

Subjects: Boys, kindergarten through third grade.

Methods: Designs employed are rather like those used in the study of "appetitive drives". Limiting the availability of the stimulus class relative to its usual availability pattern is taken to constitute "deprivation", and providing a relative abundance of stimuli is taken to constitute "satiation", when in an immediately subsequent test in which the stimulus class is made contingent on a response, that stimulus is found relatively more effective in the former case and relatively less effective in the latter.

Duration: Continuing through 1966.

Investigator(s): Jacob L. Gewirtz, Ph.D., Research Psychologist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2N248 Clinical Center, Bethesda, Md. 20014.

19-CG-5 THE OBSERVING RESPONSE AND SPATIAL CONTIGUITY IN TACTUAL DISCRIMINATION LEARNING OF CHILDREN

Subjects: Four groups of fourth-grade children.

Methods: Children were presented with a tactual discrimination learning task in which the spatial contiguity relationships among stimulus, response, and reward were varied. The number of times and the length of time that subjects touched the discriminands were measured and related to the learning process.

Findings: No significant effect of contiguity was found; however, both frequency and time measures showed a consistent pattern, viz., a peak at criterion and a decrease thereafter. Results were in agreement with those of recent studies and were interpreted within the framework of observing response theory.

Duration: June 1964-June 1965.

Investigator(s): Richard A. Wunderlich, Ph.D., Associate Professor, and Virginia Ioria, B.A., Graduate Assistant, Catholic University of America, Washington, D. C. 20017.

19-CG-6 LEARNING STYLES OF PRESCHOOL CHILDREN

Purpose: To determine individual learning styles--auditory, visual, and kinetic preferences.
Subjects: Brooklyn College's Early Childhood Center population.
Methods: Observation, testing.
Duration: November 1964-indefinite.
Investigator(s): Leonore Boehm, Ph.D., Assistant Professor of Education; and Clara Loomanitz, Ed.D., Director, Early Childhood Center, Brooklyn College, City University of New York, Brooklyn 10, N. Y.

19-CJ-1 A FOLLOW-UP NORMATIVE STUDY OF NEGRO ELEMENTARY SCHOOL CHILDREN IN THE SOUTHEASTERN U.S.

Purpose: To follow up the 1960 normative sample of Negro elementary school children used in the standardization of the 1960 Binet.
Subjects: 320 children in grades 5 through 10 in 3 locations in Florida.
Methods: Retesting of 1960 normative sample on same instruments: Binet, California Achievement-Demographic Sheet.
Duration: January-December 1965.
Investigator(s): Wallace A. Kennedy, Ph.D., Associate Professor, Department of Psychology, Florida State University, Tallahassee, Fla.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-CJ-2 THE INFLUENCE OF STIMULATION ON THE VARIABILITY OF INFANT TEST SCORES

Purpose: To investigate the day-to-day variability in scores made by infants on developmental tests and to determine extent to which such variability is influenced by individual's state of arousal at time of testing.
Subjects: 16 infants between the ages of 5 and 7 months.
Methods: Each infant is tested on three successive days under identical, standardized conditions. A 12-minute period of no stimulation precedes the test on the first day, but for the second and third days the experimental group receives stimulation through interaction with an adult during this period while the control group continues to receive no stimulation at this stage of the session. Infants are tested with scales from the Griffiths Mental Development Test.
Duration: 1964-1965.
Investigator(s): H. R. Schaffer, Ph.D., Lecturer, Department of Psychology, University of Strathclyde, Glasgow C.1, Scotland.

19-CJ-3 INFANT TESTS AS PREDICTORS OF ADULT INTELLIGENCE

Purpose: Statistical analysis of the predictability of adult measures from early infant and preschool tests. Stress is not so much on prediction of test scores as to discover type of item in infant and preschool tests which provides prediction for adult tests.
Subjects: Infants who were later placed in adoptive homes and a smaller group of infants living with their parents were tested with the Cattell-Stanford and Kuhlmann Developmental Scale at three-month intervals from three months of age through 18 months, then at yearly intervals from two

through six years of age. These 59 children are now 16 to 22 years of age. Methods: The plan is to contact the subjects and administer adult forms of the two original tests. Use will be made of additional information on and history of the child in evaluating early and adult tests. This information is in the form of reports sent to the referring agency, which contained in addition to the test results, observations of the child's behavior and any special reports made by the parents concerning the intervening period. Comparison of the adopted and nonadopted children's records will be made. This data will permit comparisons of the children before placement and their subsequent adoption. Although the number of children who were living with their parents is smaller, some comparisons between the groups will be possible.
Investigator(s): Anna S. Elonen, Ph.D., and William L. Hays, Ph.D., Professors of Psychology, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-CM-1 CHILD'S WORLD OF LEARNING

Purpose: To describe children's perceptions of learning in terms of process, concreteness, and extension of principles and details. This is being compared with teacher and curricula perceptions.
Subjects: Pupils of several elementary schools.
Methods: Children teaching children; tapes; classroom observation; and group and individual interviews.
Findings: So far, suggestive that children tend to see procedures as more important than principles.
Duration: Fall 1964-1966.
Investigator(s): Mary Alice White, Ph.D., Associate Professor of Psychology, Teachers College, Columbia University, New York, N. Y. 10027.
Cooperating group(s): New World Foundation.
Publication: Mimeographed copy of preliminary results available; further publication planned in 1965-1966.

19-CM-2 THE MEANING OF PRAYER: A DEVELOPMENTAL STUDY

Purpose: To understand the nature of the conceptual development of the meaning of prayer in children.
Subjects: 160 children from 5 to 12 years of age, 80 males and 80 females, 20 at each age level.
Methods: Projective pictures of persons at prayer; extended individual interviews based on a series of preconstructed and tested questions.
Findings: A very regular and orderly sequence of stages was revealed: a global-undifferentiated stage; a concrete-differentiated stage; and an abstract-differentiated stage. The content of prayer went from an egocentric to an allocentric mold, and from more immediate to more distant and social items.
Duration: September 1964-June 1965.
Investigator(s): Diane G. Long, Ph.D., Clinical Psychologist, Camarillo State Hospital, California State Department of Mental Hygiene, Camarillo, Calif; David Elkind, Ph.D., Associate Professor, and Bernard Spilka, Ph.D., Professor, Department of Psychology, University of Denver, Denver, Colo.
Publication: Data now available. Paper presented at convention of the Religious Research Association in Chicago, June 1965.

19-CM-3 NUMBER CONCEPT DEVELOPMENT IN CHILDREN

Subjects: Preschool and early-school children, normal, retarded, and brain-damaged.

Methods: Two main approaches are used: standard discrimination learning techniques, and Piaget-type studies.

Duration: April 1963-indefinite.

Investigator(s): P. C. Dodwell, Ph.D., Associate Professor of Psychology, Queen's University, Kingston, Ont.

Cooperating group(s): Ontario Mental Health Foundation.

Publication: Published in form of progress reports to the Ontario Mental Health Foundation.

19-CM-4 ASSOCIATIVE CLUSTERING IN PRESCHOOL NURSERY CHILDREN

Purpose: The associative clustering method is used to study the development of concept utilization in preschool nursery children; and to test the hypotheses that associative clustering of children will be positively related to educational level of their parents and the level of training of their nursery school teachers.

Subjects: 210 "normal" nursery school children, ages 2 to 5.

Methods: Three dimensions of stimulus support (words, pictures, things) are used to present a stimulus list of 12 items organizable into the four categories of toys, fruits, clothing and eating utensils for free recall. Relationships between associative clustering and the traditional variables of verbal learning such as serial order and total recall will be examined. Performance of subjects will then be used as a comparative standard for future studies of concept utilization in retarded and autistic children.

Duration: June 1963-June 1964.

Investigator(s): Ernest Lawrence Rossi, Ph.D., Post-Doctoral Fellow in Clinical Psychology; and Hedda Bolgar, Ph.D., Chief Psychologist, and Director, Clinical Psychology Training Program, Psychiatric and Psychosomatic Research Institute, Mount Sinai Hospital, 8720 Beverly Blvd., Los Angeles 48, Calif.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-CM-5 DEVELOPMENTAL DETERMINANTS OF CUE SELECTION IN CONCEPT LEARNING

Purpose: The study represents an attempt to answer two basic questions: (1) What is the effect of verbal mediation on cue selections? and (2) What is the effect of motivation on verbal mediation in a cue selection task situation? The initial experiment is designed as a necessary first study to determine effects of verbal labels as mediating responses on the breadth of concept class as measured by cue selection strategy. The extent to which category (class) width changes as a function of chronological age will be explored.

Subjects: 120 children, ages 10 to 14, from each of the fourth, sixth, and eighth grades.

Methods: Materials for the pretest will consist of two 14 x 8 1/2" sheets containing 24 2" x 2" stimuli per page. Twelve of these stimuli will be triangles, 12 quadrilaterals, 12 octagons, and 12 will be random forms. Triangles will be divided into four classes of three shapes, e.g., equilateral, right, and obtuse. The four classes will be upright, inverted, incomplete, and "dotted representations."

Investigator(s): Charles D. Smock, Ph.D., Associate Professor of

Psychology, Humanities School of Social Science and Education, Purdue University, Lafayette, Ind.
Cooperating group(s): Purdue Research Foundation.

19-CM-6 DEVELOPMENTAL STUDY OF TIME PERSPECTIVE

Purpose: To determine whether there are consistent developmental trends and class differences in length of future time perspective; and to evaluate the relationship between future time perspective and personality adjustment.
Subjects: 748 public school children equally divided between grades 5, 8, and 11.
Methods: Three measures of future time perspective (including the story completion technique), and the California Test of Personality were administered.
Duration: March 1963-continuing.
Investigator(s): Elise E. Lessing, Ph.D., Assistant Director of Research, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-CM-7 DEVELOPMENT OF CONCEPT FORMATION IN CHILDREN

Purpose: To study the kinds of processes of concept formation employed by children of different levels of mental development, and to uncover some characteristics of children's thinking.
Subjects: Three groups of young children.
Methods: An experiment is to be conducted concerning the effects of variety of and instructional set on concept formation as a function of chronological age and mental maturity. Subjects are to be tested on a concept formation task.
Duration: 1965-1966.
Investigator(s): Arthur R. Jensen, Ph.D., Associate Professor of Education, and Harriett A. Podell, Ph.D., Lecturer in Education, University of California, Berkeley 4, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-CM-8 FAR TRANSPOSITION OF INTERMEDIATE-SIZE IN PREVERBAL CHILDREN

Purpose: This study is part of a larger project in which response factors underlying conceptual transfer are being investigated.
Subjects: Boys and girls in the age range 3 years 4 months to 4 years 9 months. About 400 children from the nursery schools of Montgomery County, Md. have been tested.
Methods: Subjects were screened for possession of the middle-size concept using an adaptation of the method developed by Spiker, Gerjuoy, and Shepard. Subjects were subsequently given double discrimination training of two different types, and were then tested on far transposition.
Findings: Among preverbal subjects, those over four years profit more from double discrimination training than those four years or younger, and girls more than boys. Double discrimination training involving very disparate stimulus sets and transfer to an intermediate set was also found to be more facilitative of subsequent transposition than double discrimination training

involving less disparate sets and transfer to a set beyond the range of the training sets.
Duration: 1964-continuing.
Investigator(s): Albert J. Caron, Ph.D., Research Psychologist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Publication: *Journal of Experimental Child Psychology*.

19-CP-1 A DEVELOPMENTAL STUDY OF AUDITORY APPERCEPTUAL ORGANIZATION

Purpose: To investigate the genetic development of the ability to organize material presented auditorily.
Subjects: 48 boys and 48 girls, 24 from each of 4 grades, (1, 4, 7, 11), matched for I.Q.
Methods: An auditory task consisting of 13 triads (1 demonstration and 12 experimental triads) of randomly selected tape-recorded sounds (train, cow, baby crying, wind, etc.) was created. Subjects were required to provide the story or part of a story suggested by each of the three sounds. A scoring system tapping the structural qualities of each story was created and proved reliable. (Story content is not an issue).
Findings: The youngest (first grade) group produced the poorest responses and the oldest group (11th grade) produced the best organized stories as predicted. However there were no differences between the middle groups (4th and 7th) which was not anticipated. There were no differences between boys and girls.
Duration: May 1963-December 1964.
Investigator(s): Matthew Perlman, Ph.D., Psychologist, Convalescent Hospital for Children, Rochester, N. Y.
Cooperating group(s): Fairport Central School System, N. Y.

19-CP-2 THE EFFECT OF OVERTRAINING ON LEARNING SET FORMATION IN CHILDREN

Purpose: To study differential effects of overtraining on learning set formation in problems which differ in structure.
Subjects: 8-year old children.
Methods: A series of five classification problems was used. There were four stimuli to be assigned to two classes in each problem.
Findings: Effect of overtraining on learning set formation appears to be a function of the type of problem. Transfer from problem to problem was facilitated by overtraining on individual problems only in situations in which the subject begins a categorization rule which will apply to the solution of subsequent problems of the series.
Duration: August 1964-August 1965.
Investigator(s): Judith Crooks, Ph.D. Candidate, University of Pennsylvania, Philadelphia 4, Pa. (Reported by Richard L. Solomon, Ph.D., Professor of Psychology, University of Pennsylvania.)
Publication: Plan to publish in *Journal of Experimental Child Psychology*.

19-CP-3 PROBLEM SOLVING AS A FUNCTION OF LANGUAGE

Purpose: To investigate the influence of language on problem-solving efficiency. This will involve a study of the influence of a single language (Navaho and English) on problem solving, plus the influence of two types of

bilingualism ("compound" and "coordinate") on problem solving.
Subjects: Navaho children.
Methods: Comparing the problem-solving behavior of four groups: (1) Navaho-speaking Navahos; (2) English-speaking Navahos; (3) early bilingual Navahos; and (4) late bilingual Navahos.
Duration: September 1965-August 1966.
Investigator(s): Kenneth R. Stafford, Ph.D., Associate Professor, Department of Counseling and Educational Psychology, Arizona State University, Tempe, Ariz.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-CP-4 PARAMETERS OF YIELDING IN CHILDREN

Purpose: To investigate the child's choice when forced to choose between an alternative which is perceptually correct and an alternative apparently picked by others.
Subjects: Elementary and high school subjects.
Methods: Subjects in groups of three are required to make perceptual judgments. The perceptual tasks are presented to the subject via a slide projector and the subject indicates his choice by pressing a button. Bogus norms are provided through a series of lights on a panel in front of each subject.
Findings: The magnitude of yielding is inversely related to age. No sex differences are apparent. Older children appear to be more influenced by peers while younger children are more influenced by adults. Magnitude of reward for accuracy does not seem to influence yielding in this type of situation.
Duration: March 1963-June 1966.
Investigator(s): Kenneth L. Hoving, Ph.D., Assistant Professor of Psychology, Kent State University, Kent, Ohio.
Publication: Child Development 36:1:175-184, 1965.

19-CP-5 DEVELOPMENTAL ASPECTS OF CONCEPT ATTAINMENT

Purpose: To describe developmental stages of students from first through ninth grade levels as they affect the solution of a three-dimensional classification problem; to utilize the Inhelder-Piaget, and Bruner systems of describing stages of cognitive development; and to determine if differences in developmental stages are related to verbal and/or performance-type aptitudes.
Subjects: Approximately 360 students selected at random to represent each grade from first through ninth, with about 40 from each.
Methods: Subjects will be asked to place 54 solids into a three-dimensional sorting bin. The solids will be presented as a group, with varieties as to size, color and shape. Variations are such as to present hierarchies of categorization. The bin will be made of transparent material, and in three tiers which may be stacked or lifted for access. Analysis will involve the determination of levels of cognitive development from sensorimeter schemata through formal thought, and will include a description of the mode of attack, or strategy employed by the subjects in the solution of the problem.
Duration: Not reported-December 1965.
Investigator(s): David R. Stone, Ph.D., Professor of Educational Psychology, Utah State University, University Hill, Logan, Utah.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-CP-6 AN EXPERIMENTAL STUDY OF CREATIVITY AND THE SOLVING OF SOCIAL PROBLEMS

Purpose: To present empirical evidence of the difference or lack of difference between more creative and less creative high school students in their methods of solving social problems.
Subjects: Two groups of senior high school students, 18 in each group, identified as more creative and less creative by means of Getzel's and Jackson's Creativity Tests, and matched on the basis of their scores on the California Mental Maturity Test.
Methods: Three masked situational problems of a social nature were administered to the subjects: Spearman's rank-order method for finding correlation; a t-test for correlated samples; and Chi-square were used to test the null hypotheses.
Findings: Results indicate that there are no differences between more creative and less creative senior high school children, as identified by Getzel's and Jackson's creativity measures, in their modes of solving the masked situational problems.
Duration: April-August 1963.
Investigator(s): John P. Casey, Ed.D., Assistant Professor of Education, Southern Illinois University, Carbondale, Ill.
Cooperating group(s): University High School, Indiana University.
Publication: *Journal of Educational Research*, 1966.

19-CP-7 MEDIATIONAL HYPOTHESIS IN STIMULUS GENERALIZATION

Purpose: To study development of mediational processes in children and effect this has upon primary stimulus generalization.
Subjects: 108 children divided into two groups according to chronological age: 6-7 year olds and 10-11 year olds.
Methods: Stimulus generalization board (Tempone, 1965) where a stimulus is presented for a number of trials (in this particular study 15, 30, or 45 trials). Subject was taught to make a response to this stimulus. Following this presentation, stimuli that varied along a spatial dimension were presented. Test was whether or not subject responded or generalized to these other stimuli.
Findings: For younger subjects, as the number of training trials increased the extent of generalization increased; for older subjects the opposite effect was observed, a decrease in generalization with increased training trials. The latter was attributed to the development of mediational processes in these older children.
Duration: June 1964-May 1965.
Investigator(s): Vincent J. Tempone, Ph.D., Assistant Professor of Psychology, University of Arizona, Tucson, Ariz. 85721.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Tempone, V. J., "Stimulus-response Unit and a Stimulus-response Mediational Hypothesis in Primary Stimulus Generalization," *Proceedings of the 73rd Annual Convention of the American Psychological Association*, 69-70, 1965.

19-CP-8 SOCIALIZATION FACTORS AND CREATIVITY: BIRTH ORDER

Purpose: To evaluate the evidence for a relation between birth order and creativity based on a synthesis of studies in the literature and data collected during the first phase of the study on the Development of Young Scientists.

Subjects: 97% of a sample of high aptitude male students who entered the 1963 Science Talent Search and returned questionnaires.
Methods: Statistical analysis.
Duration: 1964-1965.
Investigator(s): Lois-ellin Datta, Ph.D., and Morris B. Parloff, Ph.D., Chief, Section on Personality, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-CP-9 SOCIALIZATION FACTORS AND CREATIVITY: RELIGIOUS AFFILIATION

Purpose: To evaluate the evidence for a relation between religious affiliation, religious background, and scientific creativity, using data already reported and information collected during the first phase of the study on the Development of Young Scientists.
Methods: Essentially a statistical analysis, it will differ from those reported in the literature by (1) more extensive cross-classification with variables such as socio-economic status of the home and child-rearing practices, and (2) use of analysis of variance to estimate the contribution these variables and their interaction may make to early scientific productivity.
Duration: 1964-1966.
Investigator(s): Lois-ellin Datta, Ph.D., and Morris B. Parloff, Ph.D., Chief, Section on Personality, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

Personality

19-DA-1 CHILDREN'S NIGHTMARES

Purpose: To study nightmares in children in their relation to child development and the handling of conflicts in the various phases.
Subjects: Clinic cases and children of relatives.
Methods: Clinical observation; case study approach.
Findings: Nightmares found to be rich source of information for studying a variety of issues and conflicts.
Duration: 1961-continuing.
Investigator(s): John E. Mack, M.D., Staff Psychiatrist, Child Psychiatry Unit, and Assistant Director of Psychiatry, Massachusetts Mental Health Center, Boston, Mass. 02115. (Reported by Gregory Rochlin, M.D., Director, Child Psychiatry Unit.)
Publication: Bulletin of the Philadelphia Psychoanalytic Society, October 1964; International Journal of Psychoanalysis, in press.

19-DA-2 BELIEF AND PREJUDICE: A TEST OF ROKEACH'S THEORY

Purpose: To test Rokeach's theory that prejudice may be in large part the result of perceived dissimilarity of belief systems.
Subjects: 750 ninth graders in two urban junior high schools in New York State, non-Jewish white, Jewish, and Negro.

Methods: Attitudinal responses of subjects are separately analyzed with respect to "stimulus persons" systematically varying in race, religion, status, and similarity vs. dissimilarity of values to those previously endorsed by the respective individual subject. Dependent variables include measures of effect ("friendliness") and of social distance toward the stimulus person. Responses will also be related to a variety of other data obtained from the same subjects a year previously in a large-scale study of intergroup relations and attitudes.
Duration: May 1964-August 1965.
Investigator(s): M. Brewster Smith, Ph.D., Professor of Psychology; Jane Allyn Hardyck, Assistant Research Psychologist; and David D. Stein, Graduate student in Psychology and Research Assistant, Survey Research Center, University of California, Berkeley, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-DA-3 A NORMATIVE STUDY ON THE EMOTIONAL DEVELOPMENT OF LATENCY AGE CHILDREN

Purpose: To learn about the growth of children around the following tasks of emotional development: socialization within the peer group; establishment of trust in people; acceptance and control of the aggressive drive toward peers; establishment of positive attitudes toward academic learning; establishment of a conscience with respect to the property of others; and separation from parental figures.
Subjects: Two samples: the School Sample consists of 350 latency-age boys and 350 latency-age girls, distributed amongst ages 6 through 11 from two public school systems (one system in a lower-middle socio-economic community and the other in an upper-middle socio-economic community); the Clinic Sample consists of 100 latency-age boys and 100 latency-age girls, distributed amongst ages 6 through 11. These children have known problems in one or more of the six tasks described above.
Methods: Subjects were all administered the first six pictures of the Tasks of Emotional Development Test, which consists of photographs representing these tasks. An objective scoring system is used to rate each child's emotional development along each of the five following dimensions: Perception, Outcome, Affect, Motivation, and Spontaneity. Patterns of scores are evaluated from these basic ratings and serve as a method for categorizing the emotional development of children on each task.
Duration: September 1959-November 1965.
Investigator(s): Haskel Cohen, Ph.D., Chief, Psychological Services, and Geraldine Rickard, Ed.D., Supervisory Psychologist, Adolescent Outpatient Clinic, Department of Psychiatry, Children's Hospital Medical Center, 300 Longwood Ave., Boston 15, Mass.
Cooperating group(s): Charles H. Hood Dairy Foundation; National Association for Mental Health.
Publication: Publication is expected.

19-DD-1 A CIRCUMPLEX MODEL OF PERSONALITY DEVELOPMENT IN CHILDREN AND ADOLESCENTS

Purpose: To investigate the development of the two-dimensional factor space, or circumplex, found in Black's (1964) study, using data obtained in that study.
Subjects: 700 grade and high school students in the public schools of Peoria, Danville, and Decatur, Illinois, and the Child Development Laboratory of the University of Illinois.
Methods: Complex factor analysis of personality trait ratings by the

subjects' teachers; successive rotation of the factors around the factor space; and estimation of the variance contributions of each age level to the factors.
Findings: Two major factors identified: General Adjustment, and Introversion-Extraversion.
Duration: July 1964-not reported.
Investigator(s): Michael S. Black, Ph.D., Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Publication: To be submitted to Educational and Psychological Measurement.

19-DD-2 THE LEARNING OF SELF-CONTROL

Subjects: Kindergarten to high school pupils.
Duration: 1963-continuing.
Investigator(s): Richard H. Walters, Ph.D., Professor and Chairman, Department of Psychology, University of Waterloo, Waterloo, Ont.
Cooperating group(s): National Institute of Health Committee on Child Health and Human Development; Ontario Mental Health Foundation.
Publication: Numerous articles in Child Development, Journal of Experimental Child Psychology, Journal of Consulting Psychology, etc.

19-DD-3 EFFECTS OF SOCIAL DEPRIVATION AND SATIATION ON RESPONSIVENESS TO SOCIAL AND NONSOCIAL REINFORCEMENT

Subjects: First and sixth grade children.
Methods: Children are briefly socially deprived or satiated and subsequently exposed to social or nonsocial reinforcement. Responsiveness to the more reinforced lever in a binary choice game consitutes the dependent variable. Other studies consider the length of deprivation or satiation as a variable in subsequent responsiveness to reinforcers.
Findings: Socially deprived children are more responsive to social reinforcers. However, it makes no difference whether these reinforcers are positive or negative, suggesting a general drive for sociality which acts independently of anxiety drives. Socially satiated children (and particularly boys) seem more responsive to nonsocial reinforcement, indicating that satiation may also have drive properties.
Duration: January 1964-June 1966.
Investigator(s): David L. Rosenhan, Ph.D., Research Psychologist, Center for Psychological Studies, Educational Testing Service, Princeton, N. J.
Publication: Submitted to a psychological journal.

19-DD-4 RELATION OF MANIFEST ANXIETY IN CHILDREN WITH SEX, INTELLIGENCE, AND LEARNING

Purpose: To test hypotheses relating manifest anxiety in children to sex, intelligence, and learning.
Subjects: Fourth and fifth grade children in four different elementary schools in Lexington, Kentucky.
Methods: Data collected in connection with another study, "Influence of Classroom Group Cohesiveness on Learning and Adherence to Standards"--see Bulletin 16, Research Relating to Children.
Investigator(s): Albert J. Lott, Ph.D., Associate Professor, University of Kentucky, Lexington; and Bernice E. Lott, Ph.D., Professor, Kentucky State College, Frankfort, Ky.

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19-DD-5 PERSONALITY FEATURES OF POTENTIALLY CREATIVE ADOLESCENTS

Purpose: To identify personality patterns characterizing young scientists judged to be potentially creative on the basis of the quality of their scientific products. The ultimate goal of this program is to study the socialization processes which contribute to the development of relevant characteristic personality patterns.
Subjects: 537 male senior high school students classified into three groups according to degree of creative promise in the areas of science: 112 high creative, 140 middle creative, and 285 low creative. These samples were derived from data provided by the 1963 Science Talent Search conducted by the Science Service, Inc.
Methods: All subjects submitted reports of a research project which they had conducted independently. These were scored by two or more judges with regard to the creative potential demonstrated.
Duration: Not reported-1970.
Investigator(s): Morris B. Parloff, Ph.D., Chief, and Lois-ellin Datta, Ph.D., Section on Personality, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-DD-6 EXTRAVERSION AND NEUROTICISM AS DETERMINANTS OF VOCATIONAL ASPIRATION

Purpose: The general hypothesis states that the ordering of vocational goal discrepancy scores for Eysenck's four criterion groups (neurotic introverts, stable introverts, stable extraverts, and neurotic extraverts) would be the same as that of his experimental studies. In addition to the ordering of criterion groups, the following hypotheses were tested: (1) introverts have higher goal discrepancy scores than extraverts; (2) neurotic introverts have higher goal discrepancy scores than stable introverts; and (3) stable extraverts have higher goal discrepancy scores than neurotic extraverts.
Subjects: 475 senior class boys in two New York City suburban high schools. Subjects were administered the Maudsley Personality Inventory and a questionnaire about their vocational aspirations. Twenty extreme scorers on the Maudsley were selected for each of the four criterion groups.
Methods: The 80 selected subjects were administered the General Aptitude Test Battery and a questionnaire about their parent's occupation. Three vocational goal discrepancy scores (intellectual, aptitude, and socio-economic) were computed for each of the criterion group subjects.
Findings: Analysis of the results indicates that the ordering of vocational goal discrepancy scores for the four criterion groups was correctly predicted for the intellectual and aptitude discrepancy scores, but not for the socio-economic discrepancy scores. However, the lack of significant differences between adjacent groups made the stability of the ordering open to question. The tests of the specific hypotheses indicated that introverts tended to aspire to occupations above their intellectual level while extraverts tended to aspire to occupations below their intellectual level. The data for the aptitude and socio-economic discrepancy scores did not support any of the specific hypotheses. The results of the study provide some support for Eysenck's paradigm, especially as it relates to differences between introverts and extraverts in their consideration of the intellectual demands of their vocational aspirations. However, differences between criterion groups were not as sharp as they were in Eysenck's experimental studies. Results do suggest that the vocational counselor must utilize counseling techniques appropriate to the client's introversive-extraversive tendency.
Duration: January 1963-January 1965.
Investigator(s): Paul Sevransky, Counseling Psychology Trainee, Psychology Service, Teachers College, Columbia University, New York, N. Y.
Cooperating group(s): Veterans Administration.

19-DD-7 STABILITY OF PERSONALITY FACTORS IN CHILDREN AND THEIR EFFECTIVENESS AS PREDICTORS OF LATER BEHAVIOR

Purpose: To determine which of the personality source traits (isolated in factor analytical studies by Cattell) are stable and which are subject to change when children move through grade school (from age 7 to 11 to 14); and to determine how effective these personality factors are in identifying children at the high-low ends of the adjustment and achievement continuum.
Subjects: 2 samples of 100 children each (50 M and 50 F) will be selected from grades 2 and 5. Both samples will be in the normal range of intelligence and have a balanced distribution of socio-economic levels.
Methods: Both groups of children will be administered the Thurstone Primary Mental Ability Tests and Cattell's Objective Personality Test. They will be asked to fill out a questionnaire derived from Cattell's factor analytical studies of personality. Their teachers will fill out a set of behavior ratings on each child. Factor scores on the following dimensions will be obtained; Cyclothymia-Schizothymia, Ego strength, Excitability, Dominance-Submission, Surgency-Desurgency, Superego strength, Immunity to threat vs. Threat reactivity, Tender vs. Tough-Mindedness. The younger group will be retested at age 11, the older group at 14. Data analysis will proceed both cross-sectionally and longitudinally. The concurrent diagnostic effectiveness will be studied with special groups of children, i.e., gifted, emotionally disturbed, delinquents, and dropouts.
Investigator(s): Emmy E. Werner, Ph.D., Agricultural Experiment Station, University of California, Davis, Calif.
Cooperating group(s): State of California.

19-DD-8 INFANT SECURITY STUDIES

Purpose: To assess degree to which a group of children deprived in infancy by an institutional environment can overcome their intellectual, social, and emotional handicaps arising from their early experiences.
Subjects: 31 children reared in an institution during infancy.
Methods: Collection and analysis of data have proceeded since 1957. Intensive records have been kept of treatment within the institution, adjustment to foster and adoptive homes, school achievement, relationship to family and contemporaries, and medical or psychiatric treatment. Intelligence and projective tests are given every three years. Clinical analysis of this data proceeds continually.
Duration: 1957-1972.
Investigator(s): Betty M. Flint, M.A., Dip. Child Study, Assistant Professor, Institute of Child Study, University of Toronto, Toronto, Ont.
Cooperating group(s): Ontario Mental Health Foundation.
Publication: Flint, Betty M., The Security of Infants, Toronto: University of Toronto Press, 1959; Flint, Betty M., The Child and the Institution-a Study of Deprivation and Recovery, Toronto: University of Toronto Press, 1965.

19-DG-1 MASCULINITY AND FEMININITY IN THE PRESCHOOL YEARS

Purpose: To investigate the nature of masculinity and femininity at the preschool level of development.
Subjects: 50 nursery school teachers and 200 three- and four-year old boys and girls in nursery schools located on the North Shore of Chicago.
Methods: Teachers will nominate more masculine and less masculine boys and more feminine and less feminine girls in their classes by a pair comparisons

method. Then they will rate the children on a graphic checklist of items which describe the characteristics and behaviors of children. The children themselves will be asked questions designed to determine their awareness of sex differences. In addition they will be instructed to "draw a person", a measure of sex identity.
Duration: December 1964-summer 1965.
Investigator(s): Karen Sue Vroegh, M.A., Research Associate, and Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill.
Publication: Article to be published in a psychological journal.

19-DG-2 A CLINICAL CONTRIBUTION TO THE PSYCHOLOGY OF THE CHESS PLAYER

Purpose: Further study of the complexities of developing ego functions in children and adolescents, particularly mastery of their expanding real environment and sublimation of instincts. Observations of chess games in the context of treatment were used to study these processes.
Subjects: Five children (one girl and four boys) ranging in age from 8 to 15, who in the course of treatment in the clinic showed an interest in playing chess.
Methods: Direct clinical observation correlating historical data and information from the treatment process with direct observations of their chess playing.
Findings: Chess, because of some of its unique aspects, provides a useful medium through which to study the complexities of developing ego functions. The game cannot be reduced to a universal, simple, theoretical formula based on instinctual considerations alone.
Duration: October 1964-June 1965.
Investigator(s): Axel Hoffer, M.D., Fellow in Child Psychiatry, Massachusetts Mental Health Center, Boston, Mass. 02115. (Reported by Gregory Rochlin, M.D., Director, Child Psychiatry Unit, Massachusetts Mental Health Center.)

19-DJ-1 DEVELOPMENT OF PRESCRIPTIVE VALUES DURING ADOLESCENCE

Purpose: The investigation has the general aim of systematically detailing the ontogenesis of prescriptive value judgments during the adolescent growth period. Subsumed under this broad directive are the following specific guides: (1) to describe the psychological processes by which adolescent boys and girls categorize, generalize, and introject (or interiorize) prescriptive values that relate to interpersonal relationships with peers and parents; (2) to examine the generality and possible elaboration of Piaget's postulation of a developmental trend from a "morality of constraint" toward a "morality of cooperation"; (3) to relate a set of theoretical inferences based on an analysis of Piaget-type "clinical observations" of prescriptive valuing to another set of inferences based on adolescents' responses to "standardized tests" of prescriptive values developed by Gardner and Thompson (1963); and (4) to attempt to extend and refine the available tests of prescriptive values so that they more nearly encompass related judgments and decisions of the adolescent youth.
Methods: Revised and new instruments will be administered to comparable samples of age-sex groups of adolescents drawn from middle class American life. These tests will be scored, and a matrix of the intercorrelations of variables prepared for factor analysis, including age and sex as variables of major interest. An appraisal of empirical and theoretical progress will terminate the proposed project.

Investigator(s): George G. Thompson, Ph.D., Professor of Psychology, Ohio State University, Columbus 10, Ohio.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-DJ-2 VALUE PREFERENCES OF ADOLESCENTS

Purpose: Isolation of value patterns for classification of value types and their frequency and distribution.
Subjects: High school juniors and seniors.
Methods: Contextual analysis of Q-Sort of Morris' Paths of Life, the AVL Study of Values, and especially designed material.
Duration: January 1965-June 1966.
Investigator(s): Paul Dempsey, Ph.D., Assistant Professor, and Irene Dempsey, M.A., Lecturer, Department of Psychology, University of California, Davis, Calif.

19-DJ-3 A SEARCH FOR A PATTERN OF DEVELOPMENT IN THE MORAL JUDGMENTS MADE BY ADOLESCENTS

Purpose: It is hypothesized that adolescents do not emerge from the level of judgment by equality (based upon cooperation and mutual respect) nor reach the level of equitable, autonomous judgment until older than the 12+ years that Piaget postulates, and that factors of environment, sex, temperament, and motivation produce variations in the rate of development.
Subjects: Three groups of boys and girls, 11-12, 13-14, and 15 1/2-18 years of age, in a homogeneous working class school population.
Methods: Intelligence and personality testing; six anecdotes posing moral conflict questions will be answered in writing. Scoring will be on Piaget levels of Equality, Equity, and in some cases Authority.
Duration: October 1959-October 1964.
Investigator(s): E. A. Peel, Education Department, University of Birmingham, Birmingham, England. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)

19-DM-1 INTERMITTENT PUNISHMENT EFFECTS

Purpose: To study the effects of intermittent punishment procedures on the behavior of children-primarily on their subsequent resistance to continuous punishment.
Subjects: Male and female children, ages 5-11.
Methods: Children are rewarded (marbles) for playing a game. They are also inconsistently or intermittently punished (the taste of citric acid). They are then tested for resistance to continuous punishment.
Findings: Intermittent punishment increases persistance to consistant punishment.
Duration: 1964-continuing.
Investigator(s): R. K. Banks, Ph.D., Assistant Professor of Psychology, University of Waterloo, Waterloo, Ont.
Cooperating group(s): National Research Council of Canada; Defense Research Board of Canada.

19-DM-2 EFFICACY OF ANXIETY-REDUCING TECHNIQUES IN TWO PERSONALITY TYPES

Subjects: Four groups of 20 high school students, each group containing an equal number of "sensitizer" and "repressor" subjects as identified by Byrne's Hy-Pt scale.
Methods: Each group viewed an anxiety-arousing film, then was exposed to one of four anxiety-reducing procedures: (1) distraction, (2) rationalization, (3) catharsis, and (4) control. At specified intervals, measures of skin conductance (PGR) were taken. An hour after the film, 69 free association words, including words designed to recreate the film-induced anxiety, were given to the subjects individually.
Findings: For all subject groups, the film induced anxiety, as measured by skin conductance change. The four anxiety-reducing conditions had no differential effects on the conductance measure. Rationalization was more effective than the other three treatments in reducing the threat of anxiety-related cues, as measured by reaction times for the word associations. The latter result suggests that a confrontation procedure does not need to be "feeling oriented" in order to reduce anxiety. A treatment-by-personality interaction approached significance in the analysis of variance based on word association reaction times. The "sensitizer" subjects, believed to be adept in intellectualization, tended to benefit more than the "repressors" from rationalization and catharsis. The repressors, on the other hand, found the avoidance procedures more beneficial.
Investigator(s): Geraldine K. Piorkowski, Ph.D., Clinical Psychology Trainee, Psychology Service, Veterans Administration Hospital, 1900 E. Main St., Danville, Ill.
Cooperating group(s): Veterans Administration.
Publication: Dissertation Abstracts.

Social

19-EA-1 EXPERIMENTAL ANALYSIS OF SOCIAL OPERANTS IN YOUNG CHILDREN

Purpose: The investigation deals with the trial-and-error learning of certain social behavior by young children, namely, behavior involving the manipulation of another person as a tool in obtaining rewards. Such behavior is termed social operants. The specific aims of the work are as follows: (1) to standardize an experimental situation; (2) to determine what specific kinds of social operants can be trained in this situation; (3) to determine what, if any, response classes exist for young children; for example, if saying "you stink" is rewarded, does the child merely learn to say "you stink" or does the learning generalize to other verbal insults or even to nonverbal aggression?; and (4) to discover whether the child's age related to what the child learns or how rapidly he learns it.
Methods: The general procedure will involve waiting until a specific designated response, or class of responses, occurs, and then immediately presenting a reward.
Duration: 1963-1970.
Investigator(s): Thora H. Crowder, Ph.D., and William F. Crowder, Ph.D., Associate Professors, Department of Psychology, University of Mississippi, University, Miss.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-EA-2 THE PRIVATE LIVES OF PEER GROUPS AMONG YOUTHLINGS

Purpose: To learn the thoughts, feelings, attitudes, interests, and opinions, of eleven-, twelve-, and thirteen-year old children, as they are among themselves, in a world of their own, as parents and teachers do not see them. (The author has coined the word "youthling" to emphasize that this is a special age of its own and more attention should be focused on it.)
Subjects: 200 sixth-grade boys and girls (youthlings), above average in intelligence and socio-economic background, from a suburban public school in Ohio, attended by Jewish, gentile, and some Negro children.
Methods: "Slam books" are small notebooks children secretly pass around among themselves, in which they write their frank, uninhibited opinions of each other, their teachers, their likes, dislikes, and interests. At the end of the school year the teacher explained to the children that she wanted to make a study of "slam books." She asked them to give her their slam books and to answer some questions about the books. She promised them that personal information about anyone found in the books would not be revealed. The children cooperated willingly because they trusted their teacher. The answers to the teacher's questions and the contents of the 200 notebooks were analyzed.
Findings: These most unusual documentary secret data present new fascinating material about children. They provide concrete cultural content about what is going on in our own backyard. The material may be likened to front page personal gossip about everyone and everything. It is a "Who's Who" among their peers. It reports their opinions about boy-girl relationships, personality traits, personal appearance, ambitions, hobbies, habits, likes, dislikes, school, teachers, social and home relations. The self-initiated questions give a frank, detailed rating of themselves, each other, and their teachers.
Investigator(s): Rose Zeligs, Ed.D., Certified Psychologist in Private practice, 14256 Ventura Blvd., Sherman Oaks, Calif. 91403.
Publication: Author hopes to publish this by itself or as a part of a book about "youthlings."

19-EA-3 CHILDREN'S RELATIONSHIPS WITH YOUNGER AND OLDER PEERS

Purpose: To gather normative data from children on their perceptions of and relations with older and younger peers; to ascertain the types of cross-age perceptions, attitudes and relations that currently exist among children and youth, while tracing the significant socio-cultural and socio-psychological factors that are associated with these; and to assess the effects of cross-age modeling and identification processes for the child's socialization.
Subjects: Negro and white children from grades 4, 6, 8, 10, and 12, from a variety of rural and urban settings.
Methods: Interviews, questionnaires, and observations.
Duration: September 1964-June 1967.
Investigator(s): Richard A. Schmuck, Ph.D., Program Associate, Institute for Social Research, and Assistant Professor of Psychology, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Schmuck, R. A., and Lohman, A., Peer Relations and Personality Development, Institute for Social Research, The University of Michigan, 1965.

19-ED-1 INTERPERSONAL INFLUENCES IN ADOLESCENT VENEREAL DISEASE

Purpose: The research is oriented about the psycho-social concept of "risk-taking" and will investigate and evaluate various social and psychological factors which influence adolescents to engage in or avoid sexual practices which might conceivable lead to the contracting of venereal disease.
Subjects: A sample of New York City adolescents who are venereally infected and a control group of nonvenereal adolescents.
Methods: Specific independent variables (race, religion, sex, socio-economic status, and home situation) will be correlated with type and source of knowledge, and the differential effect of these variables on adolescent behavior when these factors serve as defining agents or areas for peer group relations, parental influence, and institutional interpretations of sexual behavior, and particularly of sexual behavior which might result in the contracting of a venereal disease.
Duration: June 1963-July 1965.
Investigator(s): Daniel Rosenblatt, Ph.D., Department of Environmental Medicine and Community Health, Downstate Medical Center, State University of New York, 450 Clarkson St., Brooklyn, N. Y.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-ED-2 A COMPARATIVE STUDY OF THE DATING AND COURTSHIP PATTERNS OF HIGH SCHOOL YOUTH FROM LOW INCOME FAMILIES

Purpose: To assess the beliefs, attitudes, and behaviors of adolescents from poor families during the courtship process with a long range goal of intervention in this process to provide more satisfactory marital situations. Specific aims are to investigate the motivations for beginning to date, the actual processes of dating (from the first date through the "filtering" or selection processes), and the "finalization" or formal choice of a future spouse.
Subjects: Caucasian students in an urban, midwestern high school.
Methods: Field observation in the school and neighborhoods where these adolescents spend their time have been systematically recorded in a standard anthropological manner. Formal interviews are taken individually, with the students and their parents, to measure their ideas, expectations, and attitudes. Perceptions of the child will be compared with the parents' actual expectations and characteristics, and the parents' expectations with the child's actual behavior. These comparisons will give a general understanding of the amount of communication, control, and understanding that exists between parents and children regarding dating and marriage behavior.
Duration: July 1965-March 1966.
Investigator(s): Paul R. Kimmel, Ph.D., Assistant Professor of Sociology, Iowa State University, Ames, Iowa.
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Journal publication planned.

19-EG-1 FOLLOW UP OF SMOKING HABITS OF HIGH SCHOOL STUDENTS

Purpose: To see what changes in smoking habits have occurred over a 5-year period.
Subjects: Random sample of 560 students who were in the 10th grade in 1959.
Methods: These students had a questionnaire administered in 1959, and are

receiving a repeat questionnaire by mail.
Duration: November 1964-June 1966.
Investigator(s): Eva J. Salber, M.D., Senior Research Associate, and Theodore Abelin, M.D., Assistant Professor, Department of Epidemiology, School of Public Health, Harvard University, Boston 15, Mass.

Physical handicaps

19-FA-1 EDUCATIONAL AND MEDICAL STUDY-ISLE OF WIGHT

Purpose: To ascertain the prevalence of different kinds of handicap -- physical, intellectual, educational, behavioral, and social -- among school children; to find proportion of children who have more than one handicapping condition; and to find the factors associated with different kinds of handicap.
Subjects: 3,500 children aged 8, 9, and 10 years were given initial battery of intelligence and educational tests; 10 percent sample plus 5 percent randomly selected control group chosen for individual, clinical study.
Methods: Verbal and performance intelligence tests, reading, arithmetic, and drawing tests and teacher's questionnaire given all children. Those scoring more than two standard deviations below the mean on any tests, or discrepancies between one test score and another greater than two standard deviations, or indicated by teacher's questionnaire, were (with the 5 percent control group) seen individually for three hours by a team of psychologists and psychiatrist and given special medical examination (N = c. 600).
Duration: 1964-1966.
Investigator(s): Jack Tizard, Ph.D., Professor of Child Development, University of London Institute of Education; 57 Gordon Square, London W.C. 1; T. K. Whitmore, M.R.C.S., L.R.C.P., Medical Officer, Department of Education and Science, London; and Michael Rutter, M.D., M.R.C.P., D.P.M., Senior Lecturer, Institute of Psychiatry, Maudsley Hospital, Denmark Hill, London SE 5, England.
Cooperating group(s): Department of Education and Science; University of London; Medical Research Council; National Foundation for Educational Research; Association for the Aid of Crippled Children; Isle of Wight County Council.
Publication: Monograph on first part of the survey in preparation; further monograph under consideration.

19-FA-2 MULTIFACETED RESEARCH IN CLINICAL PROBLEMS RELATING TO CLEFT PALATE WITH EMPHASIS UPON THE SCHOOL AGE CHILD

Purpose: To discover the many but interrelated parameters of good speech result in the cleft palate patient.
Subjects: Thus far, 175 children have been studied pediatrically, psychologically, audiologically, surgically, dentally, and with relation to their speech.
Methods: Research population divided into two groups: one group of children with an excellent speech result and the other of children with poor speech. Children are compared for statistical differences in intelligence, emotional development, pediatric situation, anatomic and physiologic aspects of the palate, concomitant problems, school achievement, language development, etc.

Findings: Cleft children with good speech have significantly better velarpharyngeal closure than have those children with poor speech. There seems to be no relationship to speech development in either language development or creativity. Most cleft children are reduced in these areas. Children with borderline velarpharyngeal closure show more speech anomalies and unpredictable aspects than do children who do not achieve closure or who achieve fine closure. Children with pharyngeal flaps who have good speech show a marked consistent pattern of closure as opposed to those children with flaps whose speech remains poor.
Duration: October 1962-September 1969.
Investigator(s): Edward J. Forrest, D.D.S., M.D.; Jack Matthews, Ph.D.; Ross Musgrave, M.D.; William White, M.D.; Daniel S. Cheever, M.D.; and Betty Jane McWilliams, Ph.D., Director, Clinical Research, Cleft Palate Research Center, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Many publications have already resulted from this investigation; list available from investigators.

19-FD-1 AGREEMENT AND UNCERTAINTY IN SPEECH EVALUATION

Purpose: To compare the responses of parents, students, and staff members to a standard diagnostic rating scale.
Subjects: 19 parents, 5 students, 3 staff, and 19 successive children referred to speech clinic.
Methods: Subjects independently completed a diagnostic rating scale on 19 subject children. Responses were compared for a number of diagnostic and prognostic aspects.
Findings: Parents differ significantly from students and staff members. Differences, however are closely tied to certain areas of diagnostic judgment.
Duration: July 1964-August 1965.
Investigator(s): Henry Goehl, Ph.D., Associate Professor of Speech, Temple University, Philadelphia 22, Pa.
Publication: Plan to submit to Journal of Speech and Hearing Disorders.

19-FD-2 EARLY REFERRAL OF CHILDREN WITH OBSCURE LANGUAGE DISORDERS

Purpose: To assess extent of language disorder problems in young children; to encourage their early referral by providing a diagnostic service which at present does not exist; to evaluate the success of this diagnostic approach; and to determine the need for a center providing more intense evaluation services over a period of months or years.
Methods: Referrals will be accepted after a preliminary diagnostic process has eliminated language problems associated with well-known pathologic entities. The feasibility of an additional diagnostic service which allows for observation of children over several days or weeks will be tested.
Duration: Not reported-January 1966.
Investigator(s): Angie Connor, M.D., M.P.H., Executive Officer, Mental Retardation Division, Hawaii State Department of Health, and Amy B. Foster, Supervisor of Speech and Hearing, Hawaii State Department of Education, Honolulu, Hawaii.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FD-3 DIAGNOSIS OF CYSTIC FIBROSIS IN THE NEWBORN PERIOD

Purpose: To make treatment available as early as possible and to give genetic counselling.
Subjects: Newborn infants.
Methods: Silver electrode heated aluminum cylinder sweat test.
Findings: Can test successfully on the third day of life (48+ hours).
Duration: December 1964-indefinite.
Investigator(s): Warren J. Warwick, M.D., Assistant Professor of Pediatrics, University of Minnesota, Minneapolis, Minn.
Cooperating group(s): National Cystic Fibrosis Research Foundation.
Publication: Early results presented at Cystic Fibrosis Club 1965. Publication in *Pediatrics* is planned.

19-FD-4 DIAGNOSTIC AND PROGNOSTIC TECHNIQUES IN CLEFT PALATE

Purpose: To identify observations which are useful in predicting success of the physical management of cleft palate.
Subjects: 200 children, newborn to age 15.
Methods: A variety of observations will be made for subjects on an annual basis over a period of 15 years. Observations include the areas of surgery, dentistry, speech pathology, audiology, radiology, psychology, and social history.
Duration: June 1963-continuing.
Investigator(s): Hughlett L. Morris, Ph.D., Director, Cleft Palate Research Program, University of Iowa, Iowa City, Iowa.

19-FD-5 A DEVELOPMENT AND VALIDATION STUDY OF PSYCHOMETRIC TESTS OF MENTAL IMPAIRMENT IN BRAIN-DAMAGED CHILDREN

Purpose: To investigate the validity and reliability of the Dynamic Visual Retention Test, and to discover what it reveals about specific types of cerebral dysfunction; to study its correlation with other types of visual tests (e.g., Benton's VRT) and similiar tests in other sense modes (e.g., Seashore Tonal Memory Test).
Subjects: Children, ages 8 to 15 years inclusive, with medically documented types of brain damage and cerebral dysfunction.
Methods: A neuropsychology laboratory making use of the full Halstead battery, the Benton battery, investigator's Dynamic Visual Retention test, the Wechsler and some other intelligence tests and various other sensory and motor tests, was set up in the spring of 1964. Children are seen daily, and are administered this battery which takes about five hours to carry out. Letters are sent to the neurologist, the parents, and the teachers, if requested.
Duration: 1963-continuing.
Investigator(s): W. H. Gaddes, Ph.D., Professor and Head, Department of Psychology, University of Victoria, Victoria, B. C.
Cooperating group(s): Department of National Health and Welfare of Canada.
Publication: Mimeographed publication of normative data available. Other publication anticipated.

19-FD-6 HOMOCYSTINURIA IN CASES OF ECTOPIA LENTIS AND/OR PRESUMED MARFAN SYNDROME

Subjects: Cases of ectopia lentis and/or Marfan syndrome ascertained through ophthalmologists throughout the country.

Methods: Subjects will be screened for homocystinuria using the cyanide nitroprusside test. "Positives" will be confirmed with high voltage paper electrophoresis. Full family studies with attention to consanguinity and ethnic origin and full clinical evaluation including skeletal, vascular and mental investigation will be performed in each case. Methionine loading for the detection of heterozygotes and dietary treatment of homozygotes will be explored.

Investigator(s): Victor A. McKusick, M.D., Professor of Medicine; R. Neil Schimke, M.D., Research Fellow; and Peter Hathaway, M.D., Research Fellow, Johns Hopkins University School of Medicine, Baltimore, Md. 21205.

Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FG-1 COGNITIVE DEFICITS AND BRAIN DYSFUNCTION IN EPILEPSY

Subjects: Children from age 3 to 18 with epilepsy in the following groups: right temporal lobe epilepsy, left temporal lobe epilepsy, bitemporal, maximal right or left, and centrencephalic; normal controls.

Methods: Criterion or experimental groups will be formed by use of criterion measures from EEG data, neurological examination data, and seizure behavior. Differences between groups will be studied on an extensive battery of individually administered cognitive-perceptual-motor tests, covering the following dimensions: visual perception, auditory perception, tactual perception, visual-motor, motor, learning, concept formation, memory, and language functions.

Findings: Preliminary analysis indicates factor structure in epilepsy patients is comparable to normal groups on WISC, WAIS, WB I and WB II. Wechsler scales differentiate temporal lobe seizure points, lateralized right or left with 87 percent accuracy.

Duration: January 1962-January 1969.

Investigator(s): Raymond D. Dennerll, Ph.D., Executive Director and Director of Psychological Research, Michigan Epilepsy Center, 10 Peterboro, Detroit 1, Mich.

Publication: Journal of Clinical Psychology 20:236-240, April 1964; 28:278-284, 1964.

19-FG-2 PERCEPTUAL THRESHOLDS OF NONVISUAL LOCOMOTION

Purpose: To determine perceptual thresholds of gradient and curvilinearity of pathway when walking without vision. Subproblems will involve relating the "veering" tendency and the accuracy of directioning movements to these threshold measures.

Subjects: Three groups of 50: children blind from birth (6-18 years); children accidentally blind; and sighted controls.

Methods: Perception of gradient is measured with an adjustable treadmill; veering tendency is measured via a straight line crossed by arcs marked off in degrees. Directionality is evaluated with a large 360-degree protractor; and accuracy of the perception of curvilinearity is evaluated via pathways curved to various degrees.

Duration: 1965-1966.

Investigator(s): Bryant J. Cratty, Ed.D., Assistant Professor of Physical Education; Robert S. Hutton, Research Assistant II, Department of Physical

Education; and George A. Horton, Research Assistant II, Department of Psychology, University of California, Los Angeles 24, Calif.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FG-3 SELF-CONCEPTION AND GENERAL ADJUSTMENT OF DEAF TEENAGERS

Purpose: To see if degree of social interaction has any relationship to general, home, social, and school adjustment of deaf people.
Subjects: 102 students, ages 13-21, in residence at the Missouri School for the Deaf in Fulton, Missouri, during 1963 and 1964.
Methods: 20-statements test to measure self-concept; questionnaire to measure social interaction; and the Brunschwig Adjustment Inventory to measure general, social, home, and school adjustment.
Duration: April 1964-June 1965.
Investigator(s): Sue Titus (Ph.D. Candidate, University of Missouri), Instructor in Sociology, Cornell College, Mt. Vernon, Iowa 52314.

19-FG-4 PSYCHOPHYSIOLOGICAL REACTIVITY OF ASTHMATIC CHILDREN

Purpose: To determine if asthmatic children differ significantly in physiological and psychological responses to two mild discrete stimuli (shock and tone) and to a more stressful problem-solving task during which subject is criticized for his performance.
Subjects: 50 asthmatic and 50 nonasthmatic males, 10 to 14 years old.
Methods: Each child completes modifications of a Mood Adjective Checklist and the Autonomic Perception Questionnaire, and is interviewed to determine his psychological reactions to the stress stimuli. Physiological responses include GSR, heart rate, skin temperature, muscle potentials, respiration, and finger plethysmograph. In addition to separate analyses, interactions between psychological and physiological responses will be evaluated.
Findings: Pilot study indicated significant differences between asthmatic and nonasthmatic subjects in cardiovascular responses which were not due to medication or pulmonary deficiencies or obstruction *per se*.
Duration: May 1965-April 1967.
Investigator(s): William W. Hahn, Ph.D., Psychophysiologist, Children's Asthma Research Institute, 3401 W. 19th Ave., Denver, Colo. 80204.
Publication: "Autonomic Responses of Asthmatic Children," *Psychosomatic Medicine*, in press; data for future publications will be submitted to *Psychosomatic Medicine* when available.

19-FG-5 THE CONSTRUCTION AND EVALUATION OF A DIAGNOSTIC TEST OF GRADE TWO BRAILLE MISPERCEPTIONS

Purpose: A diagnostic instrument will be constructed and evaluated in order to isolate and categorize types of misperceptions of Grade Two Braille symbols.
Subjects: Approximately 300 blind children in residential and public schools in the United States.
Methods: Test instrument will be administered to subjects and will furnish: an objectively-scored record of the frequency of Braille misperceptions; a profiled analysis of the kinds of errors according to the types of Braille

orthography and specific categories of misperceptions; and a measure of performance on a four-level scale of recognition maturity. In addition, the relation between test performance and several variables will be measured.
Duration: October 1963-April 1965.
Investigator(s): Leo F. Hanley, Ed.D., Director, College Reading Center, Boston University, 700 Commonwealth Ave., Boston, 02215; and Carl J. Davis, Ed.M., Head, Department of Psychology and Guidance, Perkins School for the Blind, Watertown 72, Mass.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-FG-6 MUSCULAR DYSTROPHY AND MENTAL ILLNESS

Purpose: To establish degree of mental illness or subnormality related specifically to motor handicap or specifically to muscular dystrophy.
Subjects: 28 boys with muscular dystrophy and 28 boys with other orthopedic disabilities.
Methods: Psychiatric interview; Serum Enzymes; I.Q. tests; Bender test; Human Figure Drawing Test.
Findings: Lower I.Q. in muscular dystrophy group, and a tendency to autism and hyperkinetic syndrome.
Duration: 1960-1966.
Investigator(s): C. E. Schorer, M.D., Staff Psychiatrist, Lafayette Clinic, 951 E. Lafayette, Detroit, Mich. 48207.
Cooperating group(s): Muscular Dystrophy Association.
Publication: *Psychosomatic Medicine*, January 1965.

19-FG-7 THE EARLY DEVELOPMENT OF CHILDREN WITH CONGENITAL DEFICITS IN VISION, AUDITION, OR MOTILITY

Purpose: To isolate the role of vision, audition, and motor function in the formation of the early ego; and to study adaptive solutions and adaptive failures among infants in these categories.
Subjects: Infants in each of these categories selected as soon after birth as possible, but not older than five months.
Methods: Longitudinal study of development from birth to three years--twice monthly observations, motion picture film record, and psychological testing.
Duration: April 1964-1968.
Investigator(s): Selma Fraiberg, M.S.W., Associate Professor of Child Psychoanalysis, and Barry L. Siegel, M.D., Instructor in Psychiatry, Department of Psychiatry, University of Michigan Medical School, Ann Arbor, Mich.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: One publication on earlier phase of project in collaboration with D. Freedman: "Studies in the Ego Development of Congenitally Blind Children," *Psychoanalytic Study of the Child*, 1964. Material from current project to be available within five years in these areas: reports of a longitudinal study (a biography in monograph for each child); and studies, cutting across all categories, describing and comparing adaptive problems at various stages of development.

19-FG-8 HOPES AND EXPECTATIONS OF CHILDREN WITH DISABILITIES, THEIR PARENTS, TEACHERS, AND THERAPISTS

Purpose: To advance understanding of: the psychological difference between hopes and expectations; factors which give content to hopes and expectations; conditions under which hopes and expectations interfere with each other, remain independent, and support each other; and the commonality and divergencies among hopes and expectations of children, parents, and teachers.
Subjects: 25 children in a special school for children with orthopedic disabilities, their parents, teachers, and therapists.
Methods: Interviews and drawings, interview analysis involving category analysis, ratings, statistical treatment, and conceptualizations.
Duration: June 1965-June 1967.
Investigator(s): Beatrice Ann Wright, Ph.D., and Franklin Shontz, Ph.D., Associate Professors, Department of Psychology, University of Kansas, Lawrence, Kans.
Cooperating group(s): National Society for Crippled Children and Adults; Capper Foundation, Topeka; University of Kansas.

19-FG-9 INVESTIGATION INTO THE SENSORY-PERCEPTUAL FUNCTIONING OF CEREBRAL PALSIED CHILDREN

Purpose: The chief hypothesis to be tested is that the cognitive and motor problems of brain-damaged children are related to subtle sensory defects that are overlooked in the conventional neurological examination.
Subjects: 75-100 children, ages 7 to 21, with congenital brain damage; and matched groups of normal controls.
Methods: Subjects will be studied with a variety of sensitive psychophysical techniques to determine roles that sensory deficit or limitations play in the more global perceptual functions.
Duration: June 1962-June 1965.
Investigator(s): Walter S. Neff, Ph.D., Director of Research, and Barbara C. Wilson, Ph.D., Institute for the Crippled and Disabled, 400 First Ave., New York 10, N. Y.
Cooperating group(s): Association for the Aid of Crippled Children.

19-FG-10 ADJUSTMENT PROBLEMS IN JUVENILE DIABETES

Purpose: A psychodynamic study of diabetic juveniles with emphasis on their social and emotional adjustment, their modes of handling diabetic routines, and their attitudes toward themselves and the disease. It will also measure the child's dependence-independence balance and its relationship to extremes in parental attitudes.
Subjects: 50 diabetic juveniles and their parents; control group of nondiabetics.
Methods: Subjects and parents will be compared in emotional adjustment, family attitudes, etc. with the control group. Well stabilized patients will be compared with poorly stabilized patients.
Duration: June 1963-July 1965.
Investigator(s): Charles R. Swift, M.D., and Frances Seidman, Ed.D., Child Guidance Center of Mercer County, 532 West State St., Trenton 8, N. J.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FG-11 WHO'S HANDICAPPED?

Purpose: Follow-up study of eight handicapped children ten years after nursery school.

Subjects: Children from nursery school age to 15 years.

Methods: Observations, tests, questionnaires, school reports, interviews, etc.

Duration: 1957-1966.

Investigator(s): Alice Jerome, M.S., Teacher Supervisor, Infants' Home of Brooklyn, 1358 56th St., Brooklyn, N. Y.

Cooperating group(s): New York City Council on School Health.

Publication: May be published in book form by Twayne Publishers, New York City.

19-FG-12 PSYCHOLOGICAL EXAMINATION OF CONJOINED TWINS

Purpose: To learn what psychological techniques are available to conjoined twins in creating any degree of separateness.

Subjects: 12-year old male twins, joined inseparably at the abdomen by a large bridge beginning just above the common navel and extending to the lower abdomen.

Methods: Psychological tests were administered in the home, and father was interviewed by a psychiatric social worker. Since united twins cannot be separated physically for independent examination, a compromise in psychometric procedure was necessary. Alternate test forms were used where possible and sequence of test presentation varied for each twin. Test battery included the Peabody Picture Vocabulary Test, the Rorschach and Behn Ink Blot Tests, the TAT, Bender-Gestalt, and DAP.

Findings: Testing reveals certain relatively superficial differences in intellect and personality. However, the over-riding impression is that of two individuals desperately struggling to arrive at some kind of personal identity. It is suggested that the ultimate resolution of their dilemma will involve a fusion of identity as a unified organism.

Investigator(s): Sidney E. Cleveland, Ph.D., Chief of Psychology Service; E. E. Reitman, Ph.D., Staff Psychologist; and D. Sheer, M.S.W., Staff Social Worker, Veterans Administration Hospital, 2002 Holcombe Blvd., Houston 31, Tex.

Cooperating group(s): Veterans Administration.

19-FG-13 PREDICTING ARTICULATION FROM CINEFLUOROGRAPHIC MEASUREMENT

Purpose: To determine effect of articulation instruction on movements of the articulators; to determine relationship between reward utterances on the part of the speech clinician and change in articulation score; and to measure effect of pharyngeal obturator reduction on articulation, articulatory movement patterns, and on oral and nasal sound pressure level.

Subjects: Children with cleft palates or inadequately functioning palates, screened for auditory perception and intelligence.

Methods: Measurement of dependent variables involves articulation testing, electronic instrumentation for measurement of sound pressure level (a probe microphone is used in the measurement of nasal sound pressure level), and instrumentation for cinefluorographic filming and playback. Practice responses by the child will be correlated with a measure of articulation improvement.

Findings: Considerable acrylic can be removed from pharyngeal obturators, which were fitted by a muscle trimming process, without producing consonant distortion or nasal emission of air during sound production.

Duration: January 1964-January 1967.

Investigator(s): Ralph L. Shelton, Jr., Ph.D., and Karl A. Youngstrom, M.D., Ph.D., Associate Professors, Hearing and Speech Department, University of Kansas School of Medicine, Kansas City, Kans. 66103.

Cooperating group(s): Cleft Palate Clinic, University of Kansas School of Medicine; National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FG-14 THE NEUROLOGICAL AND DEVELOPMENTAL EFFECTS OF NEONATAL HYPOGLYCEMIA

Purpose: To present follow-up data on eight newborn infants who exhibited hypoglycemia with neurological symptoms and 21 infants who were found to have equally low blood sugar levels but in whom no symptoms attributable to hypoglycemia were observed.

Methods: Complete physical examination; developmental evaluation based on the Gesell Developmental Schedule.

Findings: Seven of original 29 were lost to follow up; of 22 remaining, 14 were normal, 5 were abnormal, and 3 were questionable. The 5 abnormals were all in the symptomatic group. These results suggest that hypoglycemia associated with CNS symptoms in the newborn period carries a poor prognosis with respect to permanent CNS damage. Hypoglycemia unassociated with symptoms on the other hand is much less likely to result in permanent brain damage.

Duration: May 1963-March 1964.

Investigator(s): K. McRae, M.D., Assistant Director, Child Development Clinic, Children's Hospital, and Assistant Professor of Pediatrics, and J. Haworth, M.D., Assistant Professor of Pediatrics, University of Manitoba, Winnipeg, Man. (Reported by W. Wallace Grant, M.D., Director, Child Development Clinic, Children's Hospital, Winnipeg.)

19-FG-15 MOOD STATES ASSOCIATED WITH ASTHMA

Purpose: To measure degree of association of anxiety, deactivation, depression, aggression, and concentration mood states with asthma in a population of chronically asthmatic children, and to measure changes in mood states associated with relief of the symptom.

Subjects: 19 female and 18 male asthmatic children between the ages of 12 and 15.

Methods: An adaptation of the Nowlis Mood Adjective Check List was employed. Fifteen "asthma" measures taken during attacks and prior to treatment, and 10 "controls" taken whenever possible within 24 hours in the absence of symptoms, were obtained from each subject.

Findings: During both asthma and control periods, positive moods, e.g., "friendly", and "secure", predominate over negative moods, e.g., "grouchy", and "sluggish". However, there is a significant increase in negative moods and a significant decrease in positive moods during asthma. Striking individual differences, and some sex differences were noted.

Duration: November 1963-January 1965.

Investigator(s): Jonathan H. Weiss, Ph.D., Chief, Clinical Psychology, Children's Asthma Research Institute, 3401 W. 19th Ave., Denver, Colo. 80204.

Publication: Results are currently being prepared for publication. Manuscript will be submitted to *Psychosomatic Medicine*.

19-FG-16 A STUDY OF LEARNING DISORDERS IN CHILDREN WITH MINIMAL BRAIN DAMAGE

Purpose: An investigation in the area of psychosensory learning disorders in children, relating minimal brain damage to learning and adjustment.
Methods: New electronic equipment, specifically designed and constructed for this purpose at Northwestern University, makes possible the automatic presentation of auditory, visual, and tactile stimuli, and simultaneous automatic recording of responses. While the subject is receiving, integrating, and remembering the information presented, his speech, breathing pattern, and brain waves are recorded. Data to be collected include intersensory and intrasensory facility auditorily, visually, and tactually. Data will be analyzed through Northwestern's IBM 7094 computer. Findings will be applied to personal, social, educational, and vocational aspects of rehabilitation.
Investigator(s): Helmer R. Myklebust, Ed.D., Professor of Language Pathology and Psychology, and Director, Institute for Language Disorders; and Thomas Behrens, Assistant Professor of Language Pathology, School of Speech, Northwestern University, Evanston, Ill.
Cooperating group(s): Easter Seal Research Foundation, National Society for Crippled Children and Adults.

19-FG-17 FURTHER STUDIES OF VERBO-TONAL SYSTEMS

Purpose: To further define, analyze, and validate the Verbo-tonal Systems as originated by Professor Petar Guberina of Zagreb University, Zagreb, Yugoslavia. One portion of this total project involves children.
Subjects: Work is being done with the following typical population: 9 congenitally deaf children, 6 to 13 years old; 3 hard-of-hearing children, 9 to 16 years old; and 4 hard-of-hearing adults, over 29 years old.
Methods: All of the subjects are being given conventional audiometric tests: Pure-tone, Speech Reception Threshold, and Speech Discrimination, as thoroughly as possible, before they begin to train in the Verbo-tonal method. Verbo-tonal test has been or will be given at the time prescribed by the method, i.e., the hard-of-hearing were tested before training because they are able to respond in some way to speech stimuli. The deaf subjects will be given the test as soon as they too begin to respond to speech stimuli via the Verbo-tonal instrumentation. Subjects are retested periodically during the period of training.
Duration: July 1963-August 1968.
Investigator(s): John W. Black, Ph.D., Director, Speech and Hearing Science Area, and Courtney P. Stromsta, Ph.D., Professor of Speech, Ohio State University, Columbus 10, Ohio.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-FG-18 ON THE NATURE OF SHORT-TERM MEMORY ENCODING BY THE DEAF

Purpose: To investigate the kind of imagery deaf children use to hold material in store.
Subjects: 41 deaf children from intermediate grades, and 53 normal hearing children from the seventh grade.
Methods: A set of 27 slides, each containing 5-consonant sequence, was projected for viewing. Each slide was projected for 3.5 seconds after which the subject recorded on answer sheets what he recalled. Error matrices were constructed from the answer sheets.
Findings: Hearing subjects made a number of systematic recall errors which

could be shown to be acoustically similar to the correct letters. Deaf subjects also made certain systematic errors. These were not acoustically related to correct letters; nor insofar as the data permitted reliable test, could they be regarded as spatially related. The consistency of errors made by the deaf implies a consistent encoding procedure which is at present obscure.
Duration: November 1964-April 1965.
Investigator(s): R. Conrad, Ph.D., Assistant Director, Applied Psychology Research Unit, Medical Research Council, Cambridge, England; and Mary Lou Rush, M.S., Research Associate, Department of Speech Science, Ohio State University, Columbus 10, Ohio.
Cooperating group(s): U. S. Department of Defense; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Speech and Hearing Disorders, November 1965.

19-FG-19 NORMAL AND CLEFT PALATE SPEECH - PHARYNGEAL FLAP PROCEDURE

Purpose: To study physiological, physical and perceptual parameters of normal and abnormal speech; specifically, parameters of speech perception, sound power level, oral-nasal pressure and oral-nasal flow are studied relative to velar activity. Since palatopharyngeal valving plays an important role in controlling the direction of the breath stream and in the modification of oral pressure, the parameters under investigation are useful in evaluating the efficacy of specific surgical techniques employed to correct palatopharyngeal incompetence.
Subjects: So far, 60 adults and children who have normal speech; and 57 cleft palate subjects.
Methods: To study inter-related parameters, instrumentation is employed which makes it possible to obtain synchronized recordings of speech, intra-oral, intra-nasal air pressure, oral-nasal air flow, sound power level, and the responsible physiological events as defined by high speed cineradiography.
Duration: February 1963-September 1966.
Investigator(s): J. Daniel Subtelny, D.D.S., M.S., Chairman, Department of Orthodontia, Eastman Dental Dispensary, 800 Main St. East, Rochester, N. Y. 14603. (Reported by Joanne D. Subtelny, Ph.D., Research Coordinator, Cleft Palate Project, Eastman Dental Dispensary.)
Cooperating group(s): Department of Plastic and Reconstructive Surgery, University of Rochester School of Medicine; Department of Electrical Engineering, University of Rochester; Cleft Palate Center, University of Illinois; National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Cleft Palate Journal 1:4:402-410, 1964; two other articles in press.

19-FG-20 EXPERIMENTAL INVESTIGATION OF MINOR SEIZURES IN EPILEPTIC CHILDREN

Purpose: To discover factors which determine occurrence of episodes of bioelectric disturbance in the brains of epileptic children, particularly minor seizures and subclinical paroxysms; and to learn the effect of such episodes upon behavior, especially upon the child's ability to carry out simple tasks and to remember information.
Subjects: Children, ages 8 to 16, with frequently occurring seizures, who are being investigated as inpatients in an acute neuropsychiatric hospital.
Methods: The bioelectric disturbance as recorded in the EEG is measured as

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the child performs simple tasks whose difficulty can be systematically varied. The child's performance on simple tasks of vigilance and memory is recorded during episodes of bioelectric disturbance.
Findings: Episodes of bioelectric disturbance are most likely in those conditions which dispose the child to a very low or a very high level of arousal. When episodes of bioelectric disturbance occur, they do not cause all-or-none effects, but differentially impair efficiency according to the amount of information being processed.
Duration: Not reported-October 1968.
Investigator(s): S. J. Hutt, M.A., Research Fellow, Park Hospital for Children, Oxford University, and St. Catherine's College, Oxford, England.
Cooperating group(s): Oxford Regional Hospital Board; Sembal Trust; British Epilepsy Association.
Publication: *Developmental Medicine and Child Neurology* 5:559-571, 1963; *Proceedings of the Royal Society of Medicine* 57:13, 1964. Further studies to be published.

19-FG-21 COMMUNICATIVE DISORDERS ASSOCIATED WITH APERT-PARK-POWERS SYNDROME

Purpose: To investigate hearing levels and speech and language characteristics in patients with Apert-Park-Powers syndrome. The high incidence of hearing loss observed clinically suggests the possibility of mechanical interference with the 8th cranial nerve.
Findings: Incomplete results indicate a high incidence of hearing loss, and voice disorders related to very high arched palates, or cleft palates.
Duration: March 1963-continuing.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology, and Chief of Communicative Disorders Division; and Nancy A. Timmons, M.S., Assistant Instructor in Speech Therapy, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr.

19-FG-22 COMPARISONS OF HEARING LEVEL, LANGUAGE AND NONLANGUAGE SKILLS, AND TEACHER RATINGS OF DEAF ADOLESCENTS

Purpose: To describe language and nonlanguage skills in a group of students at the Nebraska School for the Deaf, and to relate these scores to teacher ratings of communicative abilities and to hearing levels. Clinical observations of poor language abilities in these subjects have raised the question of specific language disabilities as well as sensory deficit.
Findings: Incomplete results indicate language scores are very low in this group, with great discrepancies between language and nonlanguage scores in some individuals. Speech and pure tone audiometry scores are related but not perfectly correlated. Some individuals appear to have language disabilities beyond those caused by deafness.
Duration: February 1963-continuing.
Investigator(s): Marshall S. Hiskey, Ph.D., Professor of Educational Psychology, University of Nebraska, Lincoln; John H. Wiley, Ph.D., Associate Professor of Speech Pathology, and Chief of Communicative Disorders Division; and Nancy A. Timmons, M.A., Assistant Instructor in Speech Therapy, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr.

19-FG-23 REFERENT GROUPS AND GOAL SETTING IN PHYSICALLY HANDICAPPED CHILDREN

Purpose: To identify the influence of certain referent groups on the goal-setting behavior of physically handicapped children, that is, to study how the physically handicapped child sets his goals when he sees his performance as compared to physically handicapped and to the nonphysically handicapped.
Subjects: 120 children from three elementary schools for the physically handicapped.
Methods: Basic procedure is to show the child a picture of a group of either (1) physically handicapped children; (2) physically normal children; or (3) mixed physically handicapped and physically normal children, and to request that he indicate how well he expects to perform on a simple cancellation task in reference to certain standards met by one of the three groups mentioned above. The child would then be given three to four minutes of the cancellation task (e.g., crossing out all O's in a page containing various letters of the alphabet). In reality the task has little meaning in itself; the primary concern is how the child sets his goals when he believes the reference standards to be one of the groups mentioned above.
Duration: Spring-fall 1965.
Investigator(s): Reginald Jones, Ph.D., Assistant Professor of Education, and Harriet Mandell, M.A., Research Assistant in Education, University of California, Los Angeles, Calif. (Reported by Ernest P. Willenberg, Ed.D., Director of Special Education, Los Angeles City Schools.)

19-FG-24 VERBAL MEDIATION IN CEREBRAL PALSY

Purpose: To investigate the role of verbal mediation in the performance of sensory and perceptual tasks in cerebral palsied as compared to non-neurologically impaired children.
Subjects: 232 cerebral palsied and nonimpaired children ranging in age from 7 to 15. The cerebral palsied sample is being limited to congenital cases with diagnoses of quadriplegic and hemiplegic spasticity and athetosis with and without spasticity.
Methods: Psychophysical procedures: problem-solving and perceptual tasks are presented to subjects while verbal mediation is manipulated by supplying or withholding labels. The investigation involves a series of five experiments.
Duration: June 1965-May 1967.
Investigator(s): Barbara C. Wilson, Ph.D., Institute for the Crippled and Disabled, 340 E. 24th St., New York, N. Y.
Cooperating group(s): Easter Seal Research Foundation; United Cerebral Palsy, Inc.
Publication: Plan to publish in psychological journals and in child development journals.

19-FG-25 PATTERN DETECTION IN BRAIN INJURY

Purpose: To study the interpretation of the nature of perceptual defect in hidden-figure tasks for brain-injured subjects. Oculomotor control may account wholly or in part for the observed phenomena; contaminants may account for some of the findings with traditional hidden-figure tasks.
Subjects: Cerebral-palsied children and brain-injured adults, with matching controls.
Methods: Investigator will examine relationship of oculomotor control to form-detection tasks and relationship between form-detection and cognitive tasks. The statistical display should permit precise measurement of form-

detection and its contribution to subsequent cognitive achievement.
Duration: Not reported-August 1966.
Investigator(s): Charles F. Reed, Ph.D., Department of Psychology, Temple University, Philadelphia 22, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FG-26 PSYCHOLOGICAL EFFECTS OF SICKLE CELL ANEMIA AND OTHER CHRONIC ILLNESSES

Purpose: To discover if sickle cell anemia has peculiar effects on children's social and intellectual development; to evaluate parents' attitudes toward and handling of children's illness; and to evaluate these effects against the general cultural patterns of the Negro child in order to see if the culture or the illness is responsible for any apparent differences.
Subjects: 75 sickle cell anemia patients; other chronically-ill Negro and white children; and healthy Negro and white children, all matched for age, sex, and socio-economic status.
Methods: Subjects will be examined on an intensive battery of psychological tests, and compared with controls. Subjects will be re-examined in three years.
Investigator(s): Ann F. Neel, Ph.D., Assistant Professor, Department of Pediatrics, Howard University College of Medicine, 2441 Sixth St., N. W., Washington, D. C. 20001.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FG-27 READING AND LISTENING IN LEARNING BY THE BLIND

Purpose: To determine the relative efficiency of listening and reading (both braille and large type) as a means of learning materials from the areas of literature, social science, and science; to explore the use of accelerated aural materials where listening is found effective as a means of learning; and to study techniques for using auditory materials in learning by the blind.
Subjects: All subjects must be legally blind. In each of the three different areas being investigated, there will be 96 braille and 96 print students from grades 4, 5, and 6; and 96 braille and 96 print students from high school.
Methods: Separate analyses of variance of the treatments x treatments x treatments x levels design (2 x 2 x 2 x 3) were run for the high school group and the elementary group to determine if differences in learning of literary material resulted from any of the main effects being tested or their interactions. The treatments under study were mode of learning (reading or listening), type of reader (print or braille), and amount of practice (one-day or three-day). Grades constituted the levels. Similar analyses will be made for science and social studies materials.
Findings: Results of the study on literary material showed that while elementary students learned equally well by either listening or reading, high school students learned slightly more by reading. However, when results were evaluated in terms of the amount learned per unit of time spent, learning through listening was more efficient than learning through reading by 140 percent for elementary students and 64 percent for high school students.
Duration: September 1963-August 1967.
Investigator(s): Carson Y. Nolan, Ph.D., Director, and June E. Morris,

M.A., Research Associate, Department of Educational Research, American Printing House for the Blind, Louisville, Ky.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results will be published, possibly in the form of a monograph, after the study is completed.

19-FJ-1 CHILDHOOD ASTHMA AND THE PSYCHOLOGICAL ENVIRONMENT

Purpose: To ascertain whether a radical change in the psychological environment will induce a change in asthma (frequency and/or severity) in selected asthmatic children while the physical environment remains constant (within limits of normal variation); to ascertain whether such a change in asthma, if obtained, is reproducible; and if such change occurs, to identify and describe those psychological variables relevant to the alteration in asthma.
Subjects: 15 children or adolescents with asthma between the ages of 7 and 16 inclusive, living in the Denver metropolitan area and being treated as outpatients by pediatricians or pediatric allergists.
Methods: Method of altering a child's psychological environment is to effect the removal of parents and siblings from the home of the child and to introduce a substitute parental figure for a period of approximately two weeks. Daily measures of pulmonary function as well as daily clinical histories of asthma and medication are obtained before, during, and past the separation period as are measures of mood state. A total of approximately 15 more extended interviews centering around the child's and parents' attitudes and reactions to separation are also conducted.
Duration: January 1965-December 1966.
Investigator(s): Kenneth Purcell, Ph.D., Director, Behavior Science Division; and Kirk Brady, M.A., Research Clinical Psychologist, Children's Asthma Research Institute and Hospital, 3401 W. 19th Ave., Denver 4, Colo.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal publication planned.

19-FJ-2 A VISUALLY-STEERED GROSS MOTOR DEVELOPMENT PROGRAM

Purpose: To improve physical, social, emotional, and learning activities of cerebral palsied children by providing early exploratory and developmental experience necessary to good learning and a healthy body image.
Subjects: 10 cerebral palsied children, aged 5 to 8.
Methods: Providing perceptual-motor experiences step by step until each child can produce the exact pattern; utilization of each sense (tactile, auditory, verbal, vision, etc.) to reinforce each stage of movement.
Findings: Considerable improvement in physical, social, emotional, and learning attitudes and abilities of children (not tested statistically as yet.)
Duration: September 1963-indefinite.
Investigator(s): James D. Fenn, M.A., Psychologist, Pittsfield Public Schools, and Acting Executive Director, United Cerebral Palsy Association of Berkshire County Inc., and Herbert I. Fischer, O.D., Optometrist, Pittsfield, Mass.
Cooperating group(s): United Cerebral Palsy Association of Berkshire County Inc.

19-FJ-3 PROVISIONS FOR THE EDUCATION OF MENTALLY RETARDED DEAF CHILDREN IN RESIDENTIAL SCHOOLS FOR THE DEAF

Purpose: To investigate and describe the extent of sources for the education of mentally retarded deaf children in residential schools for the deaf in the United States.

Subjects: Population of all residential schools for the deaf in the United States.

Methods: Information was requested from administrators, teachers, and a limited number of psychologists. Data were obtained on admission policies and procedures, prevalence, special academic and vocational provisions, qualifications of classroom teachers, and judgments of the most effective instructional organization, by means of mailed inquiry schedules, personal interviews, and on-site visits.

Duration: May-December 1965.

Investigator(s): Robert M. Anderson, Ed.D., Research Associate, University of Pittsburgh, Pittsburgh 13, Pa.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publication: Results of this study will be available as a doctoral dissertation and as a report to the U. S. Office of Education. Other publication plans are indefinite at this time.

19-FJ-4 DEVELOPMENT OF A RESIDENTIAL EDUCATIONAL PROGRAM FOR EMOTIONALLY DEPRIVED, PSEUDO-RETARDED BLIND CHILDREN

Purpose: To identify the pseudo-retarded blind child; and to develop a treatment-scholastic program for him.

Subjects: 10 to 15 students selected from a population of multiply-handicapped youngsters enrolled in Oregon School for the Blind.

Methods: Graduated relationship with teacher-counselor in groups of two to three children; reinforcement principles in learning; and sensory training in sound laboratory.

Duration: September 1964-July 1967.

Investigator(s): Charles C. Woodcock, M.A., Superintendent, Oregon State School for the Blind, Salem, Oreg. (Reported by David Berger, Ph.D., Institution Research Coordinator, Oregon State Board of Control, Salem, Oreg.)

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-FJ-5 CAMP BRONCHABOOSE - SUMMER CAMP FOR ASTHMATIC CHILDREN

Purpose: To provide summer camping experiences for asthmatic children and allow therein a detailed study of asthmatics under controlled conditions leading to rehabilitation of these patients. Growth and development, therapy evaluation, and psychological study will be undertaken with these patients under the direction of a qualified allergist.

Subjects: Asthmatic children between ages 6 and 15.

Methods: Accepted allergy treatment combined with proper rehabilitation techniques in a nonmedical summer camp environment which has been specially designed for the asthmatic child as demonstrated by the Rehabilitation Committee of the Research Council of the American Academy of Allergy.

Duration: October 1965-October 1966.

Investigator(s): Merle S. Scherr, M.D., Medical and Allergy Director, Camp Bronchaboose, and Chief, Allergy Clinic, Charleston Memorial Hospital,

Charleston, W. Va.
Cooperating group(s): Asthma Camp, Inc., Charleston, W. Va.
Publication: Results will be published in appropriate medical journals.

19-FJ-6 RELATIONSHIP BETWEEN EARLY MANUAL COMMUNICATION AND LATER ACHIEVEMENT OF THE DEAF

Purpose: To determine the relationship between a manual communication system established in young deaf children by deaf parents and subsequent school achievement, particularly in the language arts.
Subjects: 60 deaf children who have learned manual symbolic communication from their deaf parents will be matched with 60 deaf children of hearing parents, all of them to be drawn from six schools for the deaf, and matched by sex, chronological age, school, extent of hearing loss, estimated mental ability, and socio-economic level.
Methods: Five criterion variables will be employed: proficiency in reading, speech reading, written language, speech, and general educational achievement. Teacher-Judgments and standardized tests will be employed in the data collection. Any differences will be attributed to the early establishment of manual symbolic communication.
Investigator(s): Jack W. Birch, Ph.D., Chairman, Department of Special Education and Rehabilitation, School of Education; and E. Ross Stuckless, M.S., Instructor, University of Pittsburgh, Pittsburgh 13, Pa.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-FJ-7 AUDITORY TO VIBRATORY EXPERIENCE TRANSLATION

Purpose: To test a General Auditory to Vibratory Experience Translator (GAVET), which has been developed for use by the profoundly deaf.
Subjects: Four profoundly deaf children and four matched controls.
Methods: For the research, the GAVET will be reduced to miniature scale for continuous wear. Subjects will be fitted with the GAVET, while controls will be given a bone conduction unit purported to be of advanced design. Development of communication, intellectual functioning, personality, and social relations of both groups will be studied in weekly clinical contacts and testing over a year's time. Film records of children's behavior will be made at beginning, middle, and end of the year. Behavior in these sessions will be coded and results used to provide a reliable quantitative description of the development of the two groups.
Investigator(s): Shirley J. Heinze, Ph.D., Assistant Professor of Psychology; Ramon Blatt, Principal Electronic Technician; and Carol E. Speidel, Research Assistant, Departments of Otolaryngology and Psychiatry, University of Illinois College of Medicine, 840 South Wood St., Chicago, Ill. 60612.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FJ-8 CONGENITAL HEART EVALUATION PROJECT

Purpose: Study describes immediate and long-term results of the treatment of congenital heart disease in children, and attempts to answer such questions as: Are there critical findings which correlate highly with the

outcome of treatment, either positively or negatively? How do death rates for surgery at specific ages compare by surgical procedure? By heart center? What is the expectation of life for children with congenital heart disease? What is the functional status of children who have had heart surgery after 5 to 10 years? Is improvement sustained, or is there regression?
Subjects: Children who receive help for congenital heart disease under the California Crippled Children Services Program.
Investigator(s): Nedra B. Belloc, M.A., Research Specialist; Charles R. Gardipee, M.D., Chief, Bureau of Crippled Children Services; and Charlotte M. Sautter, A.B., Research Assistant, California State Department of Public Health, 2151 Berkeley Way, Berkeley 4, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FJ-9 ANALYSIS OF EFFECTIVENESS OF TREATMENT FOR ORTHOPEDIC CONDITIONS OF INFANCY AND CHILDHOOD AS COMMONLY SEEN IN AN ORTHOPEDIC CLINIC

Purpose: To obtain a scientific evaluation of the actual end results following various means of treatment for childhood orthopedic conditions.
Subjects: All patients under treatment in the active Children's Orthopedic Clinic at the Medical Center of the University of Rochester School of Medicine.
Methods: IBM computer equipment will catalogue all subjects. Scientific analysis will be made of actual effectiveness of treatment for such conditions as clubfoot, congenital dislocation of the hip, Legg Perthes disease, and slipped femoral capital epiphysis, as well as the management of congenital and developmental anomalies, arthritis in children, poliomyelitis, and cerebral palsy.
Investigator(s): Robert Dickerson, Clinical Instructor; Frederick N. Zuck, Associate Professor; and Robert B. Duthie, Professor and Chairman, Department of Orthopedic Surgery, University of Rochester School of Medicine and Dentistry, 260 Crittenden Blvd., Rochester, N. Y. 14620.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FJ-10 PLANNING FOR EVALUATION OF GOALS, METHODS, AND ACHIEVEMENTS IN A BROADLY-ORIENTED PROGRAM OFFERING SERVICES TO THE HANDICAPPED CHILD

Purpose: To develop research projects which will help answer the following general questions: How well are services for the handicapped articulated to the real needs of children with handicapping conditions and their families? Are realistic goals being set in planning for the handicapped? Is efficient use being made of highly trained personnel in working toward these goals?
Investigator(s): John B. Bartram, M.D., Professor of Pediatrics, and Victor C. Vaughan, III, M.D., Professor and Chairman, Department of Pediatrics, Temple University School of Medicine, 2600 N. Lawrence St., Philadelphia, Pa. 19133.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-FJ-11 SURGICAL SUCCESS IN CHILDREN WITH HEART DISEASE AS RELATED TO SIGNIFICANT POSITIVE CHANGES IN SOCIAL FUNCTIONING

Purpose: To learn whether children who have been physically improved by cardiac surgery experience concomitant changes in social functioning as measured by their ability to perform age-appropriate tasks before and after surgery.
Subjects: Two groups of children, those in latency period (6 to 10 years) and those in adolescent period (16 to 21 years), admitted to Clinical Center of the National Heart Institute. Subjects will have been judged symptomatic prior to surgery, and physically improved following surgery.
Methods: Developmental theories of Freud, Erikson, Josselyn, and others have been used as a basic frame of reference for determining significant life tasks of childhood. Theoretical developmental tasks have been translated into a series of perceivable behaviors. From these a schedule has been devised which will contain a series of questions concerning life tasks as they relate to latency and adolescence. Schedule will be administered subjects in interview situation at two different points in time: before surgery and following a medically appropriate period after surgery. Schedule will be administered to subjects in specified age groups as they return to clinic for follow up, with an attempt to obtain retrospective data on their functioning prior to surgery.
Duration: Not reported-June 1967.
Investigator(s): Vincenza Bowles, and Barbara A. Murphy, M.S., Social Work Department, Clinical Research Center, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-FP-1 A STUDY OF MODES OF ADAPTATION TO CHRONIC ILLNESS BY PARENTS OF CHILDREN WITH FAMILIAL DYSAUTONOMIA

Purpose: To investigate psycho-social aspects of familial dysautonomia with the intent of studying behavioral management techniques conducive to optimal adjustment.
Methods: A self-administered questionnaire designed to elicit information regarding variances in adjustment as well as differences in parental attitudes and reactions was mailed to parents of children whose names appear on a list of the known cases of familial dysautonomia in this country. In addition, approximately 10 child-parent pairs admitted to the Clinical Center to participate in biological research studies will be interviewed in order to secure comprehensive social histories. Data regarding parent-child interaction will be systematically collected from observations charted on the ward by nursing staff; psychological testing of children and parents, both projective and intelligence, will provide an additional method of assessing the relative degree of adjustment and disturbance in the groups.
Investigator(s): Yolande B. Davenport, Social Work Department, Clinical Research Center, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

19-FP-2 PSYCHOLOGICAL STATUS OF DEAF CHILDREN AS A FUNCTION OF PARENTAL ATTITUDES

Purpose: To ascertain the effects of parental methods of child rearing upon a deaf child, as evidenced by methods of discipline, attitudes towards children in general and the deaf child in particular, and as evidenced and reflected in the behavior of the child at home and at school; to test the hypotheses: (1) that the deaf child whose parents are less concerned about

his rate of development tends to be better adjusted at school; (2) that deaf children whose mothers have significantly higher scores on Irritability and Marital Conflict will tend to be less irritable and less disruptive at school than those whose parent-scores are significantly lower; and (3) that delayed weaning and toilet training and less tension as reported by parents will characterize those children whose mothers have lower scores on Intrusiveness, Acceleration, Comradeship, and Sharing.
Subjects: Entire school population (96 children, ages 3 to 14) of Mill Neck Manor, a day school for the deaf, and their families.
Methods: Administration of a questionnaire and the PARI in a home visit; recording of deaf child's responses to a "test" of authority figures; and teachers' ratings of the children on a modification of the Haggerty-Olson-Wickman Scale. Comparisons will be made between scores from the mothers of the sample with scores obtained by Mann, Kramm, and Reed with mothers of children with other handicaps.
Duration: September 1963-August 1964.
Investigator(s): Oliver E. Graebner, Ed.D., Professor of Psychology, Valparaiso University, Valparaiso, Ind.; and Melvin W. Luebke, Headmaster, Lutheran School for the Deaf, Mill Neck Manor, N. Y.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-FP-3 VARIABLES IN DISTORTION OF HEART ILLNESS IN CHILDREN

Purpose: To isolate factors which might account for distortion of severity of congenital heart illness in children.
Subjects: Approximately 100 children between the ages of 8 and 14 (and their mothers) who will or have been examined on the cardiac inpatient or outpatient service of the University of Florida Medical Center.
Methods: A behavioral questionnaire will be given to the mother, child, and cardiologist in order to obtain a picture of how these different people view the severity of the congenital heart illness. Those subjects who view the severity of the illness as different from the cardiologists will be said to distort. An attempt will be made to ascertain the degree of relationship between such variables as socio-economic position, mothers' I.Q., personality factors, etc., and distortion.
Duration: November 1964-April 1965.
Investigator(s): David R. Offord, M.D., Instructor in Psychiatry, and Joseph F. Aponte, B.S., Research Assistant, Department of Psychiatry, University of Florida, Gainesville, Fla.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper to be submitted for publication in appropriate journal, Fall of 1965.

Mentally gifted

19-GA-1 VERBAL SKILLS OF SUPERIOR HIGH SCHOOL STUDENTS

Purpose: To determine the potential value of a more extensive investigation in the appraisal of verbal performances by means of analogies exercises which go beyond ordinary recognition and recall tasks commonly used in standardized tests.

Subjects: 240 tenth grade and 250 eleventh grade students who attend the Research and Guidance Laboratory for Superior Students at the University of Wisconsin.
Methods: A newly-devised exercise in verbal relationships will be administered to subjects. Results will be evaluated quantitatively, in terms of numbers of items satisfactorily completed, and qualitatively, in terms of degrees of originality and precision attained by the subjects. Experimental scores obtained will be studied as they relate to standardized test results, academic performances, vocational and educational choices, and activities of subjects as reported by themselves and by their parents and teachers.
Investigator(s): John W. M. Rothney, Ed.D., Professor of Education and Director; Marshall P. Sanborn, Assistant Professor of Education and Associate Director, Research and Guidance Laboratory for Superior Students; and Lois Witczak, Research Assistant, University of Wisconsin, Madison, Wis.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Mentally retarded

19-HA-1 EPIDEMIOLOGY OF MENTAL RETARDATION IN A RURAL COUNTY

Purpose: To determine the prevalence of mental retardation in a census population; to study the relationship of prevalence to demographic and socio-economic variables to uncover possible etiological relationships; and to study the reliability of case finding over a period of time.
Subjects: Entire population of county, ages 1-59 (17,000).
Methods: Census of county and screening of preschool, school-aged, and adult population in three stages. Those scoring below I.Q. 80 or equivalent will receive individual testing. Subjects will be retested every two years. Controls and subjects will be compared on family demographic and other types of information.
Duration: December 1964-November 1969.
Investigator(s): Paul D. Imre, M.A., M.P.H., Research Associate, and Paul V. Lemkau, M.D., Professor of Mental Hygiene, School of Hygiene and Public Health, Johns Hopkins University, 615 N. Wolfe St., Baltimore, Md. 21205.
Publication: Publication is planned.

19-HA-2 MENTAL RETARDATION JOINT AGENCIES PROJECT

Purpose: To create an effective instrumentality for improved planning, development, and coordination of services needed by the mentally retarded.
Subjects: Approximately 350 public and private agencies rendering services to Los Angeles County's 110,000 retarded children and adults.
Methods: A descriptive survey was conducted to gather data about nature and quantity of agencies' programs for the retarded; a Mental Retardation Services Board was created under the Joint Exercise of Powers provisions of the California Government Code (Sections 6500 et seq.).
Findings: There is a need for planning and coordination of services which are presently fragmented among more than 300 public and private agencies. There are major gaps in services, particularly in services for preschool and postschool retardates. There is evidence of substantial duplication of diagnostic services for school-age retardates. There are no standardized procedures for communication among agencies, resulting in impediments in

client referrals to appropriate services and in delays in transmitting case data about clients. There is a general lack of data about the characteristics and needs of the County's retardates, a lack which makes planning of services difficult.

Duration: July 1963-June 1965.

Investigator(s): Ivy P. Mooring, Ph.D., Director, and Robert Currie, M.S., Research Associate, Mental Retardation Joint Agencies Project, 731 S. Hope St., Los Angeles, Calif. 90017.

Cooperating group(s): California State Department of Mental Hygiene.

Publication: The report of the survey is available from the Welfare Planning Council, Los Angeles Region, 731 South Hope St., Los Angeles 90017.

19-HA-3 CYTOGENETIC SURVEY OF MONGOLOIDS IN BEATRICE STATE HOME

Purpose: To determine the frequency of phenotypically normal carriers for mongolism among the parents of mongoloids at the Beatrice State Home.

Subjects: 88 Trisomy G mongoloids; 1 Turner's Syndrome (XO); 5 normal leukocyte karyotypes; 5 Mosaic mongoloids (Trisomy 21/normal); 1 Mosaic mongoloid (Turner's Syndrome/Trisomy 21); and 6 D/G translocation mongoloids.

Findings: Six percent of the population studied were D/G translocation mongoloids; of the above, one-third or two percent of population studied, were born of phenotypically normal carrier mothers. The fact that five percent of the population (1 Turner's Syndrome and 5 others) were not mongoloid is merely a reflection of misdiagnosis; the detection of six mosaics (six percent) in the population studied is a reflection of perceptive diagnosis; 83 percent of the population was of the expected Trisomy 21 type of mongoloid.

Duration: February 1964-March 1965.

Investigator(s): James D. Eisen, Ph.D., Assistant Professor of Human Genetics, and Chief, Cytogenetic Laboratory, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HA-4 A SURVEY OF 782 CASES OF MENTAL DEFICIENCY

Purpose: A basic study of physical features of the more severe grades of mental handicap, and other correlations.

Subjects: Mentally retarded children resident at the Children's Cottages, Kew.

Methods: Clerical and clinical studies of the children.

Duration: June 1961-uncertain.

Investigator(s): David Buxton Pitt, M.D., and Paul Roboz, M.D., Pediatricians, Pediatric Unit, Children's Cottages, Kew, Victoria, Australia.

Publication: Preliminary report published in the Journal of Mental Deficiency Research, March 1965.

19-HA-5 PREADMISSION SERVICE AT AN INSTITUTION FOR RETARDATES

Purpose: To follow up adjustment of applicants for admission to Rosewood State Hospital and their families, who, after preadmission service, chose not to proceed toward admission, or for whom the staff of the hospital made recommendations other than admission; and to evaluate the preadmission service offered for this group.

Subjects: 273 applicants for admission between May 1, 1958, and April 30, 1960.

Methods: Analysis of the preadmission record of the applicant; use of a questionnaire by psychiatric social workers who interviewed all families in this study that could be located; and statistical analysis of the data.
Duration: December 1962-May 1965.
Investigator(s): Kurt Glaser, M.D., Clinical Director, and Barbara A. Marlowe, A.C.S.W., Chief of Social Service, Rosewood State Hospital, Owings Mills, Md.
Cooperating group(s): Friends of Psychiatric Research, Inc.; Spring Grove State Hospital; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication in appropriate journal such as American Journal of Mental Deficiency or Social Casework.

19-HA-6 SURVEY OF BLIND RETARDED CHILDREN

Purpose: To define a group of multiply-handicapped children who may need special facilities, and to define the causes.
Subjects: Population of Kew Children's Cottages.
Methods: Inquiries through various agencies.
Duration: 1962-1965.
Investigator(s): David Buxton Pitt, M.D., Pediatrician, and Malcolm B. Macmillan, M.Sc., Psychologist, Children's Cottages, Kew, Victoria, Australia.

19-HD-1 THE UNMASKING OF MENTAL DEFICIENCY FOLLOWING THERAPY OF CHILDREN WITH PSYCHOSIS

Purpose: An analysis of two cases of children who were psychotic when first seen and for whom it was not possible to establish any reliable estimate of intellectual functioning until after their psychotic state was resolved following a long period of therapy.
Subjects: Two children, one from the ward of the Massachusetts Mental Health Center and one from the senior author's private practice. One was a boy, age four when first seen by a psychiatrist, the other a girl, age five when first seen. Each has been treated and studied over a long period.
Methods: Each child has had repeated psychological examinations and continued contact with a child psychiatrist conducting psychotherapy. One child has been on a children's psychiatric ward (Massachusetts Mental Health Center) for three years. All records of early observations will be summarized and the steps in changes in the child coinciding with the emergence of valid evidence of mental deficiency will be documented.
Findings: Both of these children at initial examination were indistinguishable from other psychotic children who subsequently proved to have normal or superior intelligence. Only after subsidence of their psychotic conditions was it possible to determine their fixed intellectual limitations by psychological tests. Their subsequent management is that appropriate for intellectually retarded children.
Duration: September 1964-July 1966.
Investigator(s): Donald S. Gair, M.D., Instructor in Psychiatry, Harvard Medical School, and Chief, Children's Ward; Shirley M. Wiesenfeld, M.S.S.W., Director of Social Work; and Aydin Cankardas Wysocki, Ph.D., Chief Psychologist, Child Psychiatry Unit, Massachusetts Mental Health Center, 74 Fenwood Rd., Boston, 02115; and Charles Hersch, Ph.D., Assistant Director, Cambridge Child Guidance Center, Cambridge, Mass.
Publication: Paper in preparation, not yet completed.

19-HD-2 PEDIATRIC AND OTHER ESTIMATES OF THE DEVELOPMENTAL LEVEL OF SUSPECTED RETARDATES

Purpose: To ascertain any differences between developmental estimates of retarded young children as seen in the various professional disciplines.
Methods: Pediatric assessments of the developmental level of suspected retardates who were referred to a Mental Retardation Evaluation Clinic were compared with assessments made by psychologists, speech pathologists, and parents.
Findings: All correlation coefficients were high, ranging from .749 to .863. The data suggest that, given experience in evaluating such a unique group of children, the pediatrician can apply his knowledge of normal growth and development to children who exhibit developmental deviation.
Duration: August-October 1964.
Investigator(s): Matilda S. McIntire, M.D., Assistant Research Professor and Research Pediatrician; and Richard A. Kurtz, Ph.D., Assistant Professor of Medical Sociology, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HD-3 DIFFERENTIATION OF BRAIN-DAMAGED CHILDREN ACCORDING TO DEFECTS IN COMMUNICATION

Purpose: To select children with specific language disorders from a large population of children referred as retarded; and to describe the differences between this smaller group and the larger group.
Subjects: Preliminary group of 28 drawn from a population of 616 children referred for mental retardation.
Findings: Preliminary group differs significantly from total group in relationship of verbal and nonverbal abilities and in certain other characteristics. These data are being analyzed further.
Duration: October 1963-October 1964.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief, Communicative Disorders Division; and Matilda S. McIntire, M.D., Assistant Research Professor, and Research Pediatrician, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HD-4 URINE CHROMATOGRAPHY IN RETARDED INDIVIDUALS

Purpose: To detect biochemical abnormalities.
Subjects: Retarded children at the Children's Cottages, Kew.
Duration: June-July 1965.
Investigator(s): K. Nicholls, B.Sc.; Paul Roboz, M.D., Pediatrician; and David Buxton Pitt, M.D., Pediatrician, Children's Cottages, Kew, Victoria, Australia.

19-HG-1 STUDY OF BLOOD LEAD LEVELS IN FOUR GROUPS OF 20 RETARDED CHILDREN EACH

Purpose: To investigate the presence of elevated blood levels in retarded and/or disturbed children.
Subjects: 80 retarded children at the Children's Cottages, and at the Oakleigh Retarded Children Centre.
Methods: Estimation of blood lead levels.

Duration: 1964-1965.
Investigator(s): S. Wiener, Ph.D.; K. Benn, D.P.M.; Paul Roboz, M.D.; and A. Christophers, D.P.H., Children's Cottages, Kew, Victoria, Australia.

19-HG-2 METHOD OF CONSTANT STIMULI USED WITH THE ROD AND FRAME TASK AS A MEASURE OF FIELD DEPENDENCE IN MENTAL RETARDATES AND NORMALS

Purpose: To develop new methods and equipment to investigate similarities and differences in field dependence over mental age, chronological age, and intelligence.
Subjects: 16 retardates; 16 younger normals; and 16 older normals.
Methods: Using a modified rod and frame apparatus derived from that of Witkin, subjects were run using the method of constant stimuli. With the frame always set at 28 degrees to the side of the rod, subjects were required to report if the rod looked upright when it was objectively set at 0, 2, 4, 8, and 16 degrees; two trials each, R and L, in a random series. Extensive pretraining was carried out with mentally retarded and younger normal subjects to ensure that they understood the task. "Lie items" (simple discriminations) were inserted throughout the test series to ensure subject attention and cooperation; subjects were dropped for failure on these items. Each subject tested on rod alone (same series), three to seven days later, for intra-subject control.
Findings: No sex differences. For small angular settings of rod, group differences confounded by discrimination difficulties. On 8 degree setting of rod (with frame), mentally retarded subjects have higher number of errors than normals. On 16 degree setting, no differences.
Duration: January-August 1965.
Investigator(s): David L. Hoats, M.A., Research Scientist, E. R. Johnstone Training and Research Center, Bordentown, N. J. 08505.
Cooperating group(s): Peter Muschal School, Bordentown Township; James MacFarland High School, Bordentown.
Publication: Report will be submitted to American Journal of Mental Deficiency or an American Psychological Association journal.

19-HG-3 GROWTH OF SENSORIMOTOR INTEGRATION AND INTELLIGENCE

Purpose: To determine the presence or absence of the size-weight and size-distance illusions over the mental age range of 1.5 to 10 years in both normal and retarded children, and to relate this to level of sensorimotor growth as clinically evaluated.
Subjects: 70 retarded subjects (size-weight). 140 retarded and normal subjects (size-distance).
Methods: Subject is trained in two-choice discrimination--weight or size--depending on illusion being tested. Once discrimination is established, critical trials are introduced to determine if illusion is present. Method is operant and nonverbal. Ample reward provided for correct choice: social, symbolic, and food.
Findings: Retarded subjects differ little from normals in that size-weight illusion is established firmly by mental age one and one-half years in majority of children tested. The magnitude of the illusion is much less, however, and typically breaks down when real weight differences reaches 20 grams.
Duration: July 1964-July 1966.
Investigator(s): Jean F. Stein, Ph.D., Associate Director of Research, Woods Schools, Langhorne, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health

Service, U. S. Department of Health, Education, and Welfare.
Publication: Will submit paper to *American Journal of Mental Deficiency* or *Child Development*.

19-HG-4 PREDICTION, LEVEL OF ASPIRATION, AND EXPECTANCY OF SUCCESS IN INSTITUTIONALIZED AND NONINSTITUTIONALIZED RETARDATES

Purpose: To examine the effects of institutionalization upon optimism and self-confidence of mentally retarded adolescents.
Subjects: 11 boys, institutionalized for five years or more in a residential school for the retarded with mean age of 17 and mean I.Q. of 75; and a matched group of 11 boys living in the community, but attending day classes at the institution.
Methods: Two groups of retarded subjects (institutional and noninstitutional) and two treatment conditions (Performance Prediction and Level of Aspiration) were used in a treatment-by-levels design. Subject performed 10 trials of a nut and bolt assembly task with instructions to complete 40 assemblies in one trial before completing all 10 two-minute trials. However, experimenter manipulated subject's performance by stopping each trial after a predetermined number of units had been assembled. Golf tees in a perforated masonite board were used to allow subject to chart his trial-to-trial progress to the goal and the deadline. All subjects stated expectancy of success estimates (P(s)) after each trial. Half the subjects stated levels of aspiration for the next trial ("How many will you try to do?") while the other half stated performance predictions ("How many do you think you will do?"). A measure of actual performance was also obtained.
Findings: The institutionalized group made consistently higher estimates for their performance on the next trial and actually worked faster than the noninstitutionalized group. For both groups, levels of aspiration exceeded predictions of performance. Institutionalized subjects were more confident of ultimate success in predicting performance; residents were more optimistic when goal setting. The results have implications for the behavior of high and low self-evaluating people.
Duration: December 1964-September 1965.
Investigator(s): Marvin Rosen, Ph.D., Director of Psychology, Elwyn School, Elwyn; and James C. Diggory, Ph.D., Associate Professor of Psychology, University of Pennsylvania, Philadelphia, Pa.
Publication: Will be submitted to *Journal of Abnormal Psychology* or *Journal of Personality and Social Psychology*.

19-HG-5 CLUSTERING IN FREE RECALL: INTELLECTUAL AND DEVELOPMENTAL VARIABLES

Purpose: To investigate the growth of clustering and recall over five trials for various subject populations; to determine relationship between clustering and free recall; and to investigate two methods of increasing the free recall of mentally retarded adolescents.
Subjects: 70 adolescent retardates; 19 equal-mental age normals; 14 equal-chronological age normals; and 20 college students.
Methods: Experiment I - All subjects were presented a 20-item list consisting of five words from each of four categories. A different random order was given on each of five trials. Both the number of stimulus words recalled and the number of times a stimulus word was followed by another stimulus word from the same category were counted. Clustering above chance, based upon the number of words recalled, was measured. Experiment II - For one group of retardates, the stimulus words were presented by categories rather than randomly. A second group of retardates was instructed to recall the words in categories.

Findings: Experiment I - Retardates and equal-mental age normals did not differ from one another in amount of clustering or number of words recalled. Both equal-chronological age normals and college students recalled and clustered significantly more than the lower-mental age groups. Experiment II - Both experimental groups recalled significantly more than the retardates in the standard procedure of Experiment I; they did not differ from one another.
Duration: March-August 1965.
Investigator(s): Irma R. Gerjuoy, Ph.D., Research Scientist; and Herman H. Spitz, Ph.D., Director of Research, E. R. Johnstone Training and Research Center, Bordentown, N. J. 08505.
Cooperating group(s): Local public schools provided the normal subjects.
Publication: Plan to publish in a professional journal.

19-HG-6 COMMUNICATION PATTERNS OF MENTALLY RETARDED CHILDREN

Purpose: To determine norms, if any, of articulation development at several levels of measured intelligence and diagnostic categories.
Subjects: Patients at Pacific State Hospital, Pomona, California.
Methods: Initial and repeated evaluation with battery of assessments.
Findings: Communication patterns differ with intelligence level and diagnosed causes of retardation. Patterns within those groups are similar and serve as identification. It appears that articulation patterns have considerable diagnostic value.
Duration: 1960-1970.
Investigator(s): Irene Blanchard, Ph.D., Specialist in Communication, School Department, Pacific State Hospital, California State Department of Mental Hygiene, Box 100, Pomona, Calif. 91766.

19-HG-7 INFLUENCES OF EXTERNAL MOTIVATORS ON THE MANUAL PERFORMANCE OF INSTITUTIONALIZED RETARDATES

Purpose: To determine the effects of praise, censure, and aspiration upon the performance of retardates on a manipulation task.
Subjects: A total of 180 subjects will be employed, all with I.Q.'s between 50 and 69 (Moron range), and C.A.'s between 12 and 20. These subjects will be subdivided into six groups of 30 each (15 males, 15 females): a practice group, praise group, censure group, aspiration group, praise and aspiration group, and censure and aspiration group.
Methods: The Minnesota Rate of Manipulation Test will be employed, and each subject will be required to replace all of the pegs in the formboard. Each will be given two trials, and, with the exception of the practice group, the second trial will be held under the verbally expressed condition of either praise ("That was very, very good"), punishment ("That was very, very bad"), aspiration ("How fast do you think you will do it in this time?"), or combinations of these.
Duration: July 1964-May 1965.
Investigator(s): Manny Sternlicht, Ph.D., Psychology Consultant, Staten Island Aid for Retarded Children, 1150 Castleton Ave., Staten Island 10, N. Y.
Cooperating group(s): Willowbrook State School.
Publication: Will publish in *American Journal of Mental Deficiency*.

19-HG-8 INCIDENCE AND CHARACTERISTICS OF SPEECH AND LANGUAGE DISORDERS IN AN INSTITUTIONALIZED MILDLY RETARDED POPULATION

Purpose: To discover the incidence of various speech problems, language comprehension, and expression problems, and relate these to the case histories and hearing loss data in this population.
Findings: The data are collected and are being analyzed. The incidence of speech sound difficulties and language deficiencies is high (about 75 percent have sound deficits). The incidence of stuttering is low. Characteristics of voice problems have not yet been analyzed.
Duration: October 1962-continuing.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief, Communicative Disorders Division, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, 68105; and Gary H. Jacobs, M.A., Assistant Instructor and Speech Pathologist, Beatrice State Home, Beatrice, Nebr.

19-HG-9 INCIDENCE AND CHARACTERISTICS OF HEARING LOSSES IN AN INSTITUTIONALIZED MODERATELY RETARDED POPULATION

Purpose: To describe incidence and characteristics of hearing loss in all of the moderately retarded patients between the ages of 10 and 20 at the Beatrice State Home.
Methods: Speech and language measures will be carried out. Results of this study will be compared with results of the study on mildly retarded patients, (19-HG-10).
Duration: October 1964-continuing.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief, Communicative Disorders Division, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, 68105; and Gary H. Jacobs, M.A., Assistant Instructor and Speech Pathologist, Beatrice State Home, Beatrice, Nebr.

19-HG-10 INCIDENCE AND CHARACTERISTICS OF HEARING LOSS IN AN INSTITUTIONALIZED MILDLY RETARDED POPULATION

Purpose: To determine more accurately the incidence and characteristics of hearing loss in this population, using approaches appropriate to the retarded.
Findings: Partial analysis of the data collected reveals that the incidence of hearing loss in this population is similar to that of the normal population, and that hearing loss does not seem to be an important deterrent to acquiring speech and language for this group.
Duration: October 1962-March 1965.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief, Communicative Disorders Division, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, 68105; and Gary H. Jacobs, M.A., Assistant Instructor and Speech Pathologist, Beatrice State Home, Beatrice, Nebr.

19-HG-11 COMMUNICATIVE DISORDERS IN 616 PATIENTS REFERRED AS RETARDED

Purpose: To review incidence and characteristics of communicative disorders

reported in the evaluation of 616 children referred for mental retardation. Findings: Results indicate that communicative problems are very common in this group, and are a common cause for referral. Further analysis is being carried out, leading to revising this report and submitting it for publication.
Duration: February 1964-continuing.
Investigator(s): John H. Wiley, Ph.D., Associate Professor of Speech Pathology and Chief, Communicative Disorders Division, and Nancy A. Timmons, M.A., Assistant Instructor in Speech Therapy and Speech Therapist, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HG-12 PSYCHIATRIC ASPECTS OF MENTAL RETARDATION

Purpose: To determine the types and frequencies of emotional disturbances in a sample of 616 children referred to an evaluation unit as mentally retarded; to clarify differential diagnosis; and to elucidate relationships between emotional disturbances and mental retardation.
Findings: Prominent emotional disturbances were found in one-third of the sample of 616 children: 40 had primary emotional disturbances, 151 had emotional disturbances and were mentally retarded. Various subgroups have been studied separately: 11 mongoloids with prominent emotional disorders, 32 children displaying psychotic reactions, and autistic children. Specific attention has been given to the psychodynamic aspects of personality development of children who are retarded and those who display "pseudoretardation."
Duration: June 1964-continuing.
Investigator(s): Frank J. Menolascino, M.D., Psychiatrist, Children's Service and Mental Retardation Project, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HG-13 PSYCHOPHYSIOLOGICAL RESPONSIVENESS, ADAPTATION AND HABITUATION OF NORMALS AND INSTITUTIONALIZED RETARDATES AS A FUNCTION OF STIMULUS INTENSITY AND DURATION

Purpose: To shed light on basic processes in retardates which may underlie the more complex and molar inadequacies that lead to failure in adaptive behavior.
Methods: Normals and retardates were presented with a series of light flashes of two intensities and three durations. Initial arousal, adaptation to single stimuli, and habituation to repeated stimuli were inferred from measures of EEG alpha blocking and GSR latency, alpha blocking and GSR duration, and GSR amplitude.
Findings: Retardates were less responsive on EEG, but more responsive on GSR measures. There was no systematic interaction between intelligence and stimulus intensity or duration. Habituation rates did not differ between intelligence groups. The results are inconsistent with a number of currently prevalent theories of normal-retardate differences.
Duration: July 1962-February 1965.
Investigator(s): Wolf Wolfensberger, Ph.D., Assistant Professor of Medical Psychology and Research Psychologist, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HG-14 SYMPTOM BEHAVIOR IN RETARDED AND DISTURBED CHILDREN

Purpose: To develop a reliable means of describing the symptom behavior patterns of latency age atypical (retarded, brain-damaged, schizophrenic, behavior disorder) children.
Subjects: Children residing in institutions.
Methods: Behavioral "factors" and patterns of factor scores (through syndrome analysis) will be related to demographic and clinical information. Rater reliability of factor scores will be assessed, as well as the stability of factor scores through time.
Duration: June 1964-June 1966.
Investigator(s): George Spivack, Ph.D., Director of Psychological Research, Devereux Schools, Devon, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HG-15 AN INVESTIGATION OF EYE DISEASE IN MENTALLY RETARDED CHILDREN: SURVEY OF OCULAR SYNDROMES IN MENTAL DEFICIENCY

Subjects: Approximately 800 children at Kew Children's Cottages.
Methods: Clinical examination.
Duration: 1964-1968.
Investigator(s): Michael Hugh Mulvihills Ryan, D.O., Opthalmologist, Children's Cottages, Kew, Victoria, Australia.

19-HG-16 PRODUCTIVE THINKING IN RETARDED AND AVERAGE CHILDREN

Purpose: To examine the productive thinking characteristics of mentally retarded and average children; to examine and compare the frequency of productive thinking experiences contained in the discourse of the classroom.
Subjects: Approximately 90 subjects grouped as follows: mentally retarded in regular class; mentally retarded in special class; and average children in regular class.
Methods: Administration of productive thinking tasks including verbal tasks using verbal stimuli, verbal tasks using nonverbal stimuli, and nonverbal tasks. Taping of 45 minutes of selected classroom experiences and evaluating the discourse in relation to Guilford's structure of the intellect.
Duration: September 1964-January 1966.
Investigator(s): John F. Cawley, Ph.D., Associate Professor of Education, University of Connecticut, Storrs, Conn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-HG-17 PERSONALITY, REINFORCER, SEX, AND SCHEDULE EFFECTS ON RESPONSE RATES OF MENTALLY RETARDED CHILDREN

Purpose: To determine whether children who are described as overconforming by teachers tend to emit more responses in a repetitive, lever-pulling task than underconforming children. In addition, the relative effect of candy as compared to token reinforcers, of increasing variable ratio schedules, and of sex on response rate was examined.
Subjects: 24 mentally retarded children, ages 11 to 16, who were living at home and attending a special school.

Methods: 12 children who were extremely overconforming, and 12 who were extremely underconforming were chosen. Candy reinforcers were M & M's; tokens were beans of similar size to M & M's. Three schedules (VR 8.7, VR 17, and VR 25) were used followed by a period with no reinforcement. Each period was five minutes separated by a 30-second time out. A Dalrymple Discrimination and Differentiation panel was used together with programming, recording, and reinforcing equipment.
Findings: As predicted, overconforming children emitted more responses than underconforming children. In the present design, where only the child's initial reactions to the experimental situation were studied, reinforcer, sex, and schedule effects were not significant.
Duration: April 1963-March 1964.
Investigator(s): A. G. Slemon, Ph.D., Associate Professor, Althouse College of Education, University of Western Ontario, London, Ont.
Cooperating group(s): Department of National Health and Welfare of Canada.
Publication: Article to be submitted for publication following some further analysis of data.

19-HJ-1 LEARNING AND RETENTION IN MENTALLY RETARDED CHILDREN

Purpose: To compare the ability of mentally retarded and mentally normal children to learn and retain verbal paired associates.
Subjects: 96 educable mentally retarded children and 96 mentally normal children.
Methods: Learning and retention characteristics will be investigated as a function of meaningfulness of the paired associates, difficulty level of experimental task, and degree of original learning. Paired-associate learning materials will be made up of two lists each of meaningful and nonmeaningful associate pairs. Subjects will be assigned to minimal or extended learning condition. Paired associates will be learned using the method of adjusted learning. Retention will be tested at 24 hours and five months. Trial-and-error data will be analyzed using a 2 x 2 x 2 x 2 complete factorial analysis of covariance design. Mental Age will be used as covariate in analysis of learning data. Trials to criterion on original learning will be used as covariate in analysis of retention data.
Duration: September 1964-August 1965.
Investigator(s): Herbert J. Prehm, Instructor of Special Education, and James J. McCarthy, Assistant Professor of Education, University of Wisconsin, Madison 6, Wis.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HJ-2 CLASSICAL CONDITIONING IN RETARDATES AND NORMALS

Purpose: Investigation of basic learning processes in retarded and normal children by use of classical eyelid conditioning techniques.
Subjects: Normal and retarded children.
Methods: Classical eyelid conditioning while subjects are distracted by a motion picture.
Findings: Classical eyelid conditioning techniques may be used with a wide age range of normal and retarded children. Partial reinforcement effects are different in acquisition and extinction for retarded children as compared to the typical results found with college sophomores.
Duration: September 1964-September 1968.
Investigator(s): Leonard E. Ross, Ph.D., Associate Professor, Department of Psychology, University of Wisconsin, Madison, Wis. 53706.

Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication of results is planned in various psychological journals.

19-HJ-3 EFFECTS OF STIMULUS WORD SIMILARITY UPON DISCRIMINATION LEARNING BY TRAINABLE RETARDED CHILDREN

Purpose: To test assumption that the more dissimilar two stimulus words are in appearance, the more readily a discrimination should be made between them; and to determine, for those subjects who mastered the discrimination, if the positive stimulus word would be associated with its pictorial representation.
Subjects: 18 mongoloid and 18 brain-injured, institutionalized, trainable retarded children, without knowledge of word meanings. The M.A. range was 29-63 months.
Methods: Subjects, matched for mental age, were presented with one of three simultaneous word discriminations, all employing CAT as positive stimulus, with CAR, CUP, or PIN as negative discriminanda. Prior to discrimination training, all subjects correctly identified a cat picture. During training, this picture appeared centered above the word stimuli. Subjects received 10 trials a day for 10 days unless they attained an arbitrary criterion of mastery.
Findings: Performance was best on the low similarity (CAT-PIN) discrimination, while subjects receiving the high-similarity (CAT-CAR) treatment demonstrated chance performance. No etiological differences were found. Three of seven subjects attaining criterion responded "cat" when shown the positive stimulus card with picture absent, immediately, one day, and one week following training.
Duration: June 1964-February 1965.
Investigator(s): Richard C. Hall, Ph.D., Psychologist II; Barbara O. Ritter, B.A.; and Joyce A. Houser, A.A., Polk State School and Hospital, Box 94, Polk, Pa. 16342. (Reported by Frank I. Varva, Ph.D., Director of Psychological Services, Polk State School and Hospital.)
Publication: Pennsylvania Psychiatric Quarterly, Winter 1964.

19-HJ-4 EFFECTS OF ACTIVITY LEVEL ON A DELAY OF REINFORCEMENT TASKS IN THE RETARDED

Purpose: To investigate the effects of activity on learning.
Subjects: 30 trainable special education students.
Methods: While performing the two-choice discrimination task under a 12-second delay of candy reinforcement, children were seated in a stabilimetric chair which recorded the gross activity of the child.
Findings: No significant difference found in the mean age and mean mental age of the group which fell in the upper quartile (high active) on the activity measure and the lower quartile group (low active), but the low active group made significantly fewer errors on the discrimination task than the high active group.
Duration: April-June 1965.
Investigator(s): Robert L. Sprague, Ph.D., Research Psychologist, Children's Research Center, University of Illinois, 1007 W. Nevada St., Urbana, Ill. 61801.
Cooperating group(s): Willard School of the Champaign City Schools; National Science Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Report to be submitted to Journal of Experimental Child Psychology.

19-HJ-5 MOTOR SKILL TRANSFER BY TRAINABLE MENTALLY RETARDED AND NORMAL CHILDREN

Purpose: To determine the learning and retention abilities of trainable mentally retarded children on a specific motor task. The major element of concern was the transferability of training as well as the retention by both the experimental and controls.
Methods: The Turning Test of the Minnesota Rate of Manipulation Test was used for the learning and retention tasks with experimentals and controls. An analysis of covariance was employed to compare the 16 possible combinations for both tasks. Mental age and chronological age were covariates for the learning and retention tasks.
Findings: Trainable mentally retarded children are capable of learning and retaining a motor skill more effectively by transferring an adequate amount of practice of simple component parts of the skill rather than by practice of entire task as a unit. Normal students benefited more from practice of task as a unit than practice of its individual component parts. The pattern of significant results with respect to transfer appears to have been the same when either mental or chronological age was considered as a covariate. Efficiency of transfer and retention is significantly increased by the greater amount of practice for both normals and retardates. Retention and learning are more efficiently achieved when there is more than one factor of training.
Duration: September 1964-June 1965.
Investigator(s): William Hirsch, Ed.D., Principal, Charles Leroy Lowman Elementary School, Los Angeles City Schools, Los Angeles, Calif. (Reported by Ernest P. Willenberg, Ed.D., Director of Special Education, Los Angeles City Schools.)

19-HL-1 DETECTION OF NEW INBORN ERRORS OF METABOLISM IN MENTALLY RETARDED CHILDREN

Purpose: To detect early and treat promptly children with phenylketonuria.
Subjects: Retarded children coming to outpatient department at the University of Wisconsin Medical Center or Central Wisconsin Colony Training School.
Methods: Biochemical screening methods devoted to detection of amino acids, carbohydrates, or unusual chemicals in the urine of research patients.
Findings: Have identified cases of homocystine, Sarcosine, hyperglycinemia, homocitrullinuria, and histidinemia.
Duration: 1957-indefinite.
Investigator(s): Harry A. Waisman, M.D., Ph.D., Professor of Pediatrics, University of Wisconsin Medical Center, and Director, Joseph P. Kennedy Jr. Memorial Laboratories, Madison, Wis.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HL-2 COMPARISON OF GUTHRIE'S WITH McCAIN AND ROBBINS' METHOD OF PHENYLALANINE ESTIMATION IN SERUM

Purpose: To see if the Guthrie method (on a drop of blood) is sufficiently sensitive for control of treatment in phenylketonuria.
Subjects: Children with PKU.
Duration: 1965-1966.
Investigator(s): David Buxton Pitt, M.D., Pediatrician, Children's Cottages, Kew, Victoria, Australia.

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19-HN-1 LACRIMAL PROTEINS IN INDIVIDUALS WITH DOWN'S SYNDROME

Purpose: To detect mongolism via chemical analysis of tears.
Subjects: Brain-damaged children and their families, particularly mongoloids.
Methods: Electrophoresis and immuno-electrophoresis.
Findings: The presence of alpha 1 globulin in full-term infants after the first week of life and in premature infants after three to four weeks correlates with Down's Syndrome in over 80 percent of cases. In few hydrocephalic and microcephalics and in some members of the family of mongoloids, the same is found.
Duration: 1961-February 1963.
Investigator(s): Samuel Karelitz, M.D., Chief of Pediatrics, Long Island Jewish Hospital, 270-05 76th Ave., New Hyde Park, N. Y.

19-HN-2 URIC ACID METABOLISM IN MONGOLISM

Purpose: To determine the cause of increased serum uric acid levels in mongoloids.
Subjects: Mongoloid and non-mongoloid residents of the Fort Wayne State Hospital and Training Center.
Methods: Blood and urine analysis, isotope tracer studies, and kidney function tests.
Findings: Urea and creatinine levels as well as uric acid are elevated in the blood of mongoloids compared with non-mongoloids living under the same conditions. Mongoloids may have a kidney defect.
Duration: September 1962-February 1966.
Investigator(s): Edwin T. Mertz, Ph.D., Professor; Dwaine A. Carr, B.A.; Stephen P. Coburn, Ph.D., Head, Department of Biochemistry, Purdue University, Lafayette; and Andrew N. Weber, M.T., Clinical Laboratories, Ft. Wayne State School, Ft. Wayne, Ind.
Cooperating group(s): State of Indiana; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: American Journal of Mental Deficiency 69:814-817, 1965. Another publication now being planned.

19-HN-3 COOPERATIVE STUDY OF DOWN'S SYNDROME

Purpose: To evaluate the possibility of a rapid, simple, inexpensive method to identify translocation mongols.
Methods: Chromosome studies on a large group of mongols will be done to identify a small group of about 10 patients with translocated type. These will be matched with the same number of patients with the common form of mongolism and with mentally retarded patients who do not have mongolism. Patients in the three groups will have careful physical examinations done at Children's Hospital with selected findings reported to the Mental Retardation Branch. They will also have psychological tests, finger and palm prints, photographs, and pelvic x-rays. All data will be assembled and analyzed for differences among three study populations, by the Mental Retardation Branch.
Investigator(s): Richmond S. Paine, M.D., Chief, Section of Neurology, Department of Neurology and Neurosurgery, Research Foundation, Children's Hospital of the District of Columbia, 2125 13th St., N. W., Washington 9, D. C.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HN-4 EPIDEMIOLOGY OF MONGOLISM

Purpose: To compare retrospective information on mongols and control children to determine if significant differences exist, with respect to certain relevant life experiences of their parents, particularly exposure to radiation, reproductive history, surgical and medical history, family history, and occupational history.
Subjects: Mongols 15 years of age and younger registered in Baltimore, Maryland, are included. Controls have been matched to the cases with respect to mother's age and hospital of birth. Rosters have been prepared of a study group of 250 families with a mongoloid child and 250 control families.
Methods: After interviewing parents and review of hospital records, an attempt is made to verify the history of hospitalization, history of family illness, especially cancer, leukemia, mongolism, and congenital defects, by searching hospital records and contacting physicians or others. Mongol children who have died will be included, but results will be analyzed separately.
Duration: 1962-1965.
Investigator(s): Abraham Lilienfeld, M.D., and Arnold T. Sigler, M.D., School of Hygiene and Public Health, Johns Hopkins University, Baltimore; and Simon P. Abrahams, M.D., Assistant Chief for Biomedical Programs, Research Branch, Division of Radiological Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Rockville, Md.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HN-5 A STUDY OF DOWN'S SYNDROME IN YOUNG NEW ZEALAND CHILDREN

Purpose: To note the similarities and differences in a Maori and non-Maori population examined on the Gesell Developmental Schedules; to attempt to show the "normal" curve of development typical to such a population and to point out certain landmarks in their development.
Subjects: This is a comparative study. New Zealand population will be compared with already completed study done by author at Los Angeles Children's Hospital. Age groups one, two, and three years only.
Methods: Gesell Examination as well as other identifying data and measurements, i.e., height, weight, chromosome analysis, etc. This will differ from U. S. study in that it is cross-sectional, whereas the U. S. study was longitudinal.
Duration: 1958-not reported.
Investigator(s): Jack B. Share, Ph.D. Candidate, Department of Education, Victoria University, P. O. Box 196, Wellington, New Zealand.
Cooperating group(s): Los Angeles Children's Hospital Society; Victoria University of Wellington Interdepartmental Grant.
Publication: *American Journal of Mental Deficiency* 66:238, 1961; 68:6, 1964. Other findings will be submitted to *American Journal of Mental Deficiency* and local New Zealand journal.

19-HN-6 THE PREDICTION OF AMENTIA LEVEL IN MONGOLISM

Purpose: To predict maturity level intelligence in mongoloid subjects on the basis of early developmental landmarks.
Subjects: 303 mongoloids.
Methods: Multiple regression analysis of linearized intercorrelations between landmarks and with I.Q. level at maturity.

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Findings: A useful but limited degree of prediction of maturity I.Q. of mongoloids is possible on the basis of three early developmental landmarks.
Duration: 1964-1966.
Investigator(s): David Gibson, Ph.D., Associate Professor of Psychology, University of Alberta, Calgary, Alta.
Cooperating group(s): Province of Alberta; Department of National Health and Welfare of Canada.
Publication: American Journal of Mental Deficiency.

19-HN-7 DHA EXCRETION IN MOTHERS OF MONGOLS (DOWN'S SYNDROME)

Purpose: To study 11-deoxy 17-ketosteroid urinary excretion levels (particularly DHA) in mothers of mongols.
Methods: The study will correlate the DHA excretion levels with the chromosomal type of Down's syndrome. In those mothers who show elevated DHA, the research will attempt to identify the source of the DHA (adrenal or ovarian); and in those mothers who do not show elevated DHA excretion levels, it will endeavor to see if the ratio of DHA/17-ketosteroids is abnormal after adrenal or ovarian stimulation. Suitable controls are to be studied also in this regard. Chromosomal studies are to be done on all offsprings afflicted with Down's syndrome and on all mothers of mongols less than 29 years of age.
Duration: To be completed September 1966.
Investigator(s): David Solomon, M.D.; and Harold Nitowsky, M.D., Sinai Hospital of Baltimore, Belvedere and Greenspring Ave., Baltimore 15, Md.
Cooperating group(s): National Institute of Arthritis and Metabolic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HN-8 AN ANTHROPOMETRIC STUDY OF ANATOMIC DEVIATIONS IN HANDICAPPED CHILDREN

Purpose: To relate specific structural defects to enzyme defects by means of a developmental approach.
Methods: Graphic plotting of body measurements of handicapped children on standard deviation charts based on 12,000 normal children demonstrates specific anatomic deviations in special groups.
Duration: 1964-indefinite.
Investigator(s): Helen B. Pryor, M.D., Research Associate in Pediatrics, Stanford University, Palo Alto, and Pediatrician, Childrens Hospital, 3700 California St., San Francisco, Calif. (Reported by Hulda Thelander, M.D., Director, Child Development Center, Children's Hospital.)
Cooperating group(s): Palo Alto Medical Research Foundation; March of Dimes; United Cerebral Palsy Association.
Publication: In press: Journal of Pediatrics.

19-HN-9 MONGOLISM WITH A G/G TRANSLOCATION

Purpose: To discover the mode of transmission of hereditable chromosomal defects resulting in mongolism; specifically, the abnormality of G/G translocation is sought for in siblings and parents of individuals with this disorder.
Subjects: Tissue cultures are initiated from blood or tissue of patients with mongolism and their families.

Methods: All patients with mongolism are studied cytogenetically. Of those with translocation forms, the families are studied in an attempt to define the method of transmission and the difference between those which are hereditable and those which are not.

Findings: Of five families studied, four seem to be sporadic while one has been identified in five generations in the same family.

Duration: January 1964-December 1965.

Investigator(s): Harvey S. Rosenberg, M.D., Director of Laboratories, and Shung-jun Yang, Ph.D., Department of Pathology, Texas Children's Hospital, 6621 Fannin St., Houston 25, Tex.

Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: A paper on G/G translocation mongolism is in preparation.

19-HN-10 DOUBLE ANEUPLOIDY--DOWN'S SYNDROME AND MOSAIC TURNER'S SYNDROME IN AN APPARENT MONGOLOID

Purpose: To investigate the presence of double aneuploidy in institutionalized patients.

Methods: An apparently typical mongoloid female was examined karyotypically and was shown to be a mosaic of Turner's Syndrome in addition to Trisomy 21. Exploratory surgery revealed unilateral ovarian stroma.

Findings: This case represents one of the rare occurrences of double aneuploidy. It is presumed that primary nondysjunction in a parental gamete was responsible for the trisomic condition in the patient, and that secondary nondysjunction occurred during the patient's embryogenesis. The finding indicates that factors other than chance may be responsible for chromosomal nondysjunction.

Duration: May 1964-April 1965.

Investigator(s): James D. Eisen, Ph.D., Assistant Professor of Human Genetics, and Chief, Cytogenetic Laboratory, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HN-11 BONE AND SOFT TISSUE DEVELOPMENT IN MONGOLISM

Purpose: To provide information on bone and soft tissue development in mongolism with reference to other significant manifestations of growth.

Subjects: 71 mongols, 39 boys and 32 girls.

Methods: Six years of longitudinal growth data (including soft tissue roentgenograms, bone age, a battery of anthropometric measures, and I.Q. test results) are available on subjects. Patterns of growth of the tissue components in these children will be compared with similar data on normal children. Observations will be made on the impact of puberty and later sexual developmental on physical growth rates and the development of the tissue components in these children. The relationship of the stigmata associated with mongolism to physical growth rates, mental development, and sexual maturation will be investigated. The time of epiphyseal closure in certain of the long bones has been recorded and the sequence of events preceding and following the phenomenon will be reviewed. Both cross-sectional and longitudinal approaches will be used in analyzing the data. The availability of the longitudinal data will permit checking predictions of developmental trends against actual observations.

Duration: Not reported-1967.

Investigator(s): G. Lawrence Rarick, Ph.D., Professor of Physical Education, and Ionel F. Rapaport, Ph.D., Senior Research Scientist, University of

Wisconsin, Madison, Wis.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HP-1 EFFECT OF REFINED PRESENTATION OF FOOD ON DEVELOPMENT OF VERBAL COMMUNICATION

Purpose: To discover the effect of stimulating reflexes of sucking on possible uses of same structures for speaking.
Subjects: Patients at Pacific State Hospital.
Methods: Training all nursing personnel and patient feeders in method of presenting food in small amounts at the lips. Anecdotal evaluation.
Duration: 1960-1970.
Investigator(s): Irene Blanchard, Ph.D., Specialist in Communication, School Department, Pacific State Hospital, California State Department of Mental Hygiene, Box 100, Pomona, Calif.

19-HP-2 RESEARCH IN REMEDIAL GUIDANCE OF YOUNG RETARDED CHILDREN WITH BEHAVIOR PROBLEMS WHICH INTERFERE WITH ACADEMIC LEARNING AND ADJUSTMENT

Purpose: To analyze importance of social consequences of severe problem behavior by experimental analysis in a day care situation; to refine techniques for modification of socially unacceptable behavior problems; and to evaluate effects on child's behavior at home after parents have been trained in handling the problem consistent with behavioral principles.
Subjects: Young, noninstitutionalized retarded children, ages 3 to 10 years.
Methods: Laboratory experiments and field experiments, utilizing a laboratory setting and a nursery school setting.
Duration: September 1965-May 1966.
Investigator(s): Sidney W. Bijou, Ph.D., Professor of Psychology and Director, Program on Human Development Research, and Howard N. Sloane, Ph.D., Research Assistant Professor, University of Illinois, Urbana, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Numerous publications (list available from Children's Bureau Clearinghouse or from principal investigator.)

19-HR-1 ASSESSMENT OF VOCATIONAL REALISM IN EDUCABLE MENTALLY RETARDED ADOLESCENTS

Purpose: To determine how realistic mentally retarded adolescents nearing the terminal point in their formal education are regarding the jobs they think they can obtain when leaving school.
Subjects: 886 mentally retarded adolescents in high school special training classes.
Methods: Direct interview with each subject; collection of data from school records; and teacher and administrator interviews.
Duration: January 1964-December 1965.
Investigator(s): Molly C. Gorelick, Ed.D., Chief of Guidance Services, Exceptional Children's Foundation, 2225 W. Adams Blvd., Los Angeles, Calif. 90018.
Publication: Journal article planned.

19-HR-2 SOCIAL-PERCEPTUAL TRAINING FOR THE VOCATIONAL REHABILITATION OF MENTALLY RETARDED ADOLESCENTS

Purpose: To improve the social perceptions, inferences, and, most essentially, the behaviors of the mentally retarded adolescent in social situations, thus better to equip him for successful membership in social and vocational peer groups.
Subjects: Four classes of mentally retarded junior high school pupils and four vocational training classes of residential (state institutionalized) retardates will be involved in evaluation of the training program, with two classes of both public school and residential retardates serving as disguised controls.
Methods: Development and testing of experimental procedures for training social-perceptual skills. Experimental training procedure will be evaluated in terms of a pair of controlled studies permitting pre- and post-training measurement of social-perceptual acuity and interpersonal behaviors of all subject groups. Measures of social-perceptual acuity--rate, comprehensiveness (inclusion of relevant social cues), and accuracy (appropriateness of interpretations)--are to be derived from a standardized presentation of picture stimuli covering a wide range of social situations pertinent to retarded youth.
Duration: Not reported-December 1966.
Investigator(s): Barbara Turner Edmonson, M.A., Research Associate; Norris G. Haring, Ed.D., Director of Education, Children's Rehabilitation Unit, University of Kansas Medical Center, Kansas City; and John E. deJung, Ed.D., Research Associate, Bureau of Child Research, University of Kansas, Lawrence, Kans.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-HR-3 INFLUENCE OF OCCUPATIONAL INFORMATION COUNSELING ON REALISM OF OCCUPATIONAL ASPIRATIONS OF MENTALLY RETARDED HIGH SCHOOL BOYS

Purpose: To establish the value of occupational information as a means of creating a realistic approach to occupational goals among mentally retarded senior high school boys.
Subjects: 7 experimental and 6 control groups of mentally retarded high school boys.
Methods: Six of the experimental groups receive occupational information bi-weekly, the seventh group receives both occupational information and on-the-job training; control groups receive neither. Statistical analysis will show the presence or absence of significant difference in occupational goals and realism of occupational aspirations between experimental and control groups, as well as a relationship between the occupational goals of the experimental and control groups when influence of other variables (I.Q. and socio-economic status) has been eliminated.
Investigator(s): George A. Jeffs, Ph.D., Assistant Professor of Secondary Education, and Lillian Barnum, College of Education, University of Nevada, Reno, Nev.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-HR-4 INTEGRATION OF EDUCABLE RETARDATES IN NORMAL GROUPS

Purpose: To find out to what extent clinically diagnosed educable mentally retarded children can be helped to participate in group activities designed

for normal children; to learn the demands each type of group places on an individual member, and personality and physical characteristics necessary for a member to achieve full participation; to learn the kinds of satisfactions and frustrations the retarded child and his parents experience as he is exposed to interaction with his normal peers; and to determine the administrative arrangements and in-service training an agency must provide to accomodate such children.
Subjects: 30 educable mental retardates previously members of agency; 64 educable mental retardates newly applying to agency; 64 normal controls.
Methods: Intensive case study of each subject and control; development of criteria for placement, with rating scales; participant observation of groups with structured reporting to be converted to ratings; critical incident reporting by leaders; reporting of behavior by school teachers; supervisory reports of technical problems; agency staff reports of agency member response; and use of computer analysis whenever applicable.
Duration: June 1965-May 1970.
Investigator(s): Muriel W. Pumphrey, D.S.W., Associate Director, Social Science Institute, Washington University; and Mortimer Goodman, M.S.W., Director, Adult Services, Jewish Community Centers Association, St. Louis, Mo.
Cooperating group(s): Special District for the Educating and Training of Handicapped Children of St. Louis County, Missouri; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles will be offered to social work publications and to journals dealing with education and care of retardates. A monograph analyzing the agency's previous experience to be completed in the spring of 1965.

19-HR-5 GRADUATED HABILITATION OF MENTALLY RETARDED YOUTH, 1963-1966

Purpose: To observe closely a sample of male students going through the process of moving from an institutional environment into an independent living situation; to better appreciate the adjustment process experienced by retarded individuals as they go through placement; and to discover those students requiring supplementary assistance through resources both on and off campus.
Methods: Half the sample will be afforded a "stepping stone" via the halfway house. Control group will remain in institution until placement can be effected, moving individual directly into independent living situation in the community. Sample is limited in size to permit detailed observation of both groups and intensive analysis of each individual's progress.
Investigator(s): Joseph J. Parnicky, Ph.D., Superintendent, and Neale L. Peterson, M.S., Supervisor of Instruction, E. R. Johnstone Training and Research Center, Bordentown, N. J. 08505.
Publication: Welfare Reporter 15:4:124-128, 1964.

19-HT-1 A HABILITATION PROGRAM FOR THE SEVERELY RETARDED

Purpose: To evolve new, more effective techniques for helping profoundly retarded children develop greater self-reliance in such basic abilities as eating, communication, oral hygiene, grooming, bathing, dressing, toilet training, and physical and social dexterity.
Subjects: 160 ambulatory children, profoundly retarded, institutionalized, between the ages of 6 and 12.

Methods: New vocational skills will be introduced on wards by employed nursery school teachers and a physical education instructor, in addition to psychiatric technicians. Patients will be divided into small groups of 10 to 12, which will be cared for by the nursery school teacher or psychiatric technician, a child care specialist. The child care specialist will be assisted by a volunteer who can provide each child with a one-to-one relationship for part of the day, and a patient model who has acquired the self-help skill and can demonstrate it to severely retarded child.
Duration: 1964-1967.
Investigator(s): George Tarjan, M.D., Superintendent and Medical Director; Charles V. Keeran, Jr., M.S.W., Administrative Assistant; Anna M. Shotwell, Ph.D., Chief Psychologist; and Arthur B. Silverstein, Ph.D., Research Psychologist, Pacific State Hospital, California State Department of Mental Hygiene, P.O. Box 100, Pomona, Calif.

19-HT-2 COMMUNITY TRANSITIONAL ADJUSTMENT PROGRAM FOR MENTAL RETARDATION

Purpose: To improve methods of treatment and education of brain-damaged, emotionally disturbed, and mentally retarded children in a state institution, the major area of deficiency being the lack of continuum between treatment, special education, vocational training, and community transition.
Methods: A program of community transition starting with pre-vocational education and working through discharge, by adding to hospital staff individuals expert in areas of educational and vocational research and training, and by establishing a workshop and socialization program as a demonstration, testing feasibility of procedures.
Duration: Not reported-1969.
Investigator(s): Howard V. Bair, M.D., Superintendent and Medical Director, and Joseph E. Spradlin, Ph.D., Coordinator of Research, Parsons State Hospital and Training Center, Parsons, Kans.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-HT-3 SOME POSSIBLE EFFECTS OF DIFFERENTIAL EXPERIENCES ON RETARDED PERSONS LIVING IN VARIED RESIDENTIAL CENTERS

Purpose: To examine daily living experiences of mentally retarded children in residential centers, and to relate these experiences to changes in behavior.
Subjects: 225 mentally retarded children in six different institutions.
Methods: Detailed observation of individual child. Four research workers are being trained to record their observations on a specially designed schedule. Study is divided into two parts: a two-year follow-up of children to be transferred to a new, small institution; and retrospective comparisons with children who had been transferred to a small institution four years ago. Measures of intelligence, social maturity, and attitudes will be used.
Duration: July 1965-July 1968.
Investigator(s): M. Michael Klaber, Ph.D., Director, Mental Retardation Project, University of Hartford, Hartford, Conn. 06117.
Cooperating group(s): Office of Mental Retardation, Connecticut State Department of Health; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-HT-4 DEVELOPMENT BEHAVIORAL RATING SCALE FOR HOSPITALIZED MENTALLY RETARDED PATIENTS

Purpose: To develop an inventory which can be used by aide and nursing personnel to appraise manifest adjustment in areas of physical self-sufficiency, general adjustment, activity, and contribution; and to describe distribution of nursing care problems in various residential facilities.

Subjects: 1908 patients at a state residential facility for the mentally retarded.

Methods: Patients were rated by two aides on a 42-item inventory. 32 items were utilized from Nebraska Patient Inventory which had been used to evaluate almost the entire population (N=3704) in the three state psychiatric hospitals in Nebraska.

Findings: Reliability studies indicated highest degree of agreement was obtained on physical care and physical self-sufficiency items. Items dealing with social and personal adjustment had only moderate reliability. Comparisons of distribution of nursing care problems in mentally retarded population and psychiatric populations were carried out. Sample findings were: significantly greater number of nursing care problems in all areas of physical self-sufficiency in mentally retarded population; much greater utilization of medication in psychiatric populations; and greater proportion of individuals with full-time work assignments in retarded population.

Duration: October 1963-continuing.

Investigator(s): Dean C. Affleck, Ph.D., Associate Professor of Medical Psychology, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-HT-5 EX-INMATES OF WERRINGTON PARK IN THE COMMUNITY

Purpose: To obtain a detailed picture of how ex-inmates of Werrington Park fared in the community. Werrington Park is an establishment for intellectually-handicapped boys 14 to 18 years of age, who are cared for in three cottages of 30 boys each.

Subjects: 50 percent of all boys discharged since the opening of Werrington Park in 1955 (45 boys with ages on discharge ranging between 15 and 18 years.)

Methods: Completion of detailed questionnaire by personal interview and observation; a number of variables isolated and their interreaction examined statistically.

Findings: In general, boys were readily divided into two groups: (1) those who lived with parents or other family; and (2) those, having no family, who cared for themselves. The former tended to be apathetic, of little community value (did not work), but reasonably happy. The latter were of community value in that they worked consistently, but tended to be lonely and unstable. A number of other trends were isolated.

Duration: January-May 1965.

Investigator(s): New South Wales Department of Child Welfare and Social Welfare, William and Yurong Sts., Sydney, Australia.

19-HT-6 PROGRAM DEVELOPMENT FOR INSTITUTIONALIZED MENTALLY RETARDED CHILDREN

Purpose: To systematically apply sensorimotor and "group-living" procedures to young institutionalized mentally retarded children, and to assess the effects of this type of treatment.

Subjects: 60 institutionalized, mentally retarded children, from infancy to

three years of age, divided into three experimental groups and one control group.
Methods: First experimental group receives sensorimotor training; second group receives "group-living" procedures; and third receives both sensorimotor and "group-living" procedures. Control group receives only the standard institutional care, with equal experimenter's time to counteract Hawthorne effect. Treatment period is 30 minutes per day, with time of day randomized. Study will run for eight months on a seven-day per week basis. Index measures will be taken before, during, and following treatment.
Duration: September 1964-September 1967.
Investigator(s): James J. McCarthy, Ph.D., Assistant Professor of Education, Herbert J. Prehm, Instructor of Special Education, University of Wisconsin; and Harvey A. Stevens, Superintendent, Central Wisconsin Colony and Training School, 317 Knutson Dr., Madison, Wis.

19-HW-1 EFFECTS OF THE CHILD'S DEFICIENCY ON THE FATHER: A STUDY OF FATHERS OF MENTALLY RETARDED, CHRONICALLY ILL, AND NEUROTIC CHILDREN

Purpose: To study effects upon personalities of fathers of having a child who is deficient in health and/or adaptive competence.
Subjects: 192 fathers, 48 each of mentally retarded, chronically ill, neurotic, and healthy control children; equal age groups (4 to 8, 9 to 13) and sex groups.
Methods: Three questionnaires and sentence completion test.
Duration: February 1965-June 1966.
Investigator(s): S. Thomas Cummings, Ph.D., Associate Professor of Psychiatry, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Illinois State Department of Mental Health.
Publication: Plan to submit to child clinical journal.

19-HW-2 PARENTS OF SUSPECTED RETARDATES: THEIR PATTERNS, ADJUSTMENTS, AND EXPECTATIONS

Purpose: To analyze reactions of 472 sets of parents who brought their children to an evaluation clinic because of suspicion of mental retardation.
Findings: Results are tentative. Most parents carry on a verbal "free exchange" of ideas when discussing the child; most are seeking information about the child's future development; since the birth of the child, more families are less cohesive than more cohesive; many mothers pay less attention to their other children since the child's birth; many parents have withdrawn from community interactions.
Duration: November 1964-continuing.
Investigator(s): Richard A. Kurtz, Ph.D., Assistant Professor of Medical Sociology, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

Emotional disturbances

19-IA-1 EMOTIONAL HANDICAP IN THE ELEMENTARY YEARS: PHASE OR DISEASE

Purpose: To assess reliability and validity of a modified and abbreviated

form of Bower-Lambert process for in-school screening of emotionally handicapped children; and to study prevalence and time course of emotional handicap and its impact on child's academic progress.
Subjects: Children enrolled in grades 4, 5, and 6 in a typical, rural, northern Minnesota school district.
Methods: Preparation of academic progress charts and special keysort cards on all elementary children in school district; repeated screenings with modified Bower-Lambert method and follow-up interviews with students' teachers.
Findings: About 5 to 10 percent of elementary school children have adjustment difficulties of sufficient severity to warrant professional attention. Screening devices are adequate to the task. A significant number of children identified as emotionally handicapped do not resolve their problems without help. For this group "emotional handicap" is a disease and not a phase. The emotionally handicapped youngster gets progressively farther behind his peers academically as he moves through the elementary years.
Duration: 1961-1965.
Investigator(s): Richard G. Stennett, Ph.D., Clinical Psychologist, Northland Mental Health Center, Inc., Grand Rapids, Minn.
Cooperating group(s): Minnesota Mental Health Association; C. K. Blandin Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted to American Journal of Orthopsychiatry.

19-IA-2 IDENTIFICATION OF EMOTIONAL DISTURBANCE IN YOUNG SCHOOL CHILDREN

Purpose: To test validity of a questionnaire to be completed by classroom teacher as a screening instrument for detection of emotionally disturbed children who need professional help beyond resources of the school.
Subjects: 1,000 school children in grades one through four; 200 will be used as controls.
Methods: There is wide difference of professional opinion as to whether the teacher is an adequate casefinder of emotional disturbance in children. There is not in existence a valid, simple, inexpensive device for such casefinding. Teacher will complete a simple questionnaire on subjects and will refer those screened out (an estimated 100) to an examining pediatrician and a psychologist. Sensitivity and specificity rates will be computed to determine accuracy of questionnaire in hands of teacher as a screening tool.
Duration: June 1965-December 1966.
Investigator(s): Virginia McNamara, M.D., M.P.H., Director, School Health Service; and William F. Castellow, M.D., District Director of Public Health, Georgia State Department of Public Health, Atlanta, Ga. 30334.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IA-3 FOLLOW-UP STUDY

Purpose: To study a variety of problems in the development of psychopathology: kinds and degrees of early psychopathology and the kinds and degree they lead to later on; kinds with the worst prognosis; dominant male and female kinds; and crystallized symptoms which appear or disappear in development.
Subjects: Children from prenursery and therapeutic nursery, ages two and three, current cases as well as records of past; children from ordinary nursery school as controls.

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Methods: A developmental Q-sort is applied to 20 record cases, 20 controls, and to current cases in the phallic phase (3 to 4.5); a symptom list adapted from Rosenfeld's latency list for the nursery group is applied to the same sample; a developmental scale is also being developed.
Duration: December 1963-not reported.
Investigator(s): Frances Fuchs Schacter, Ph.D., Child Development Center, 120 W. 57th St., New York, N. Y.
Cooperating group(s): Downtown Community Nursery School; Ehrmann Foundation.

19-ID-1 ADOLESCENT MATRICIDE

Purpose: To understand the psychic determinants of three cases of matricide committed by adolescents.
Subjects: Three adolescents, two boys and one girl.
Methods: Clinical case study.
Findings: No "syndrome" has been established, as the motives and character structure of the three children differ markedly. However, in the one case that is best understood, the crime appears to have resulted from a combination of an intense, mutually-supported, lifelong sado-masochistic interaction between mother and child, and community compliance.
Duration: 1961-continuing.
Investigator(s): Donald J. Scherl, M.D., (formerly) Fellow in Child Psychiatry, and John E. Mack, M.D., Senior Staff Psychiatrist, Child Psychiatry Unit, Massachusetts Mental Health Center, Boston, Mass. 02115. (Reported by Gregory Rochlin, M.D., Director, Child Psychiatry Unit.)
Publication: Paper describing one boy in detail to be submitted to the *Journal of the Academy of Child Psychiatry*.

19-ID-2 INCIDENCE AND ETIOLOGY OF PSYCHOLOGICAL DIFFICULTIES IN ADOPTED CHILDREN

Purpose: To test validity of published claims that adopted children are subject to more difficulties than nonadopted children; and to explore the etiology of difficulties and to attempt to verify several hypotheses involving both psycho-dynamic and family structure variables.
Methods: A sample of adopted and nonadopted children will be investigated with regard to frequency of various symptoms of difficulties. "Difficulties" are defined very broadly to include a range from reading and learning problems to minor behavior disturbances, from asthma to accidents and obesity, and from psychiatric problems to delinquency. Data will be collected from records and by interview.
Duration: 1962-1967.
Investigator(s): H. David Kirk, Ph.D., Department of Sociology, University of Waterloo, Waterloo, Ont.; and Kurt Jonassohn, M.A., Department of Sociology, Sir George William University, Montreal, Que.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.

19-ID-3 AN EVALUATION OF THE EFFECTS OF EMOTIONAL TRAUMA ON THE DEVELOPMENT OF CHILDHOOD PSYCHOSIS

Subjects: 30 normal children, 20 psychotic children, and 20 children resident in an institution as wards of private and state agencies.
Methods: Measurements of pupillary reactivity as an index of autonomic

balance will be obtained on subjects.
Investigator(s): Leonard S. Rubin, Ph.D., Senior Scientist III, Eastern Pennsylvania Psychiatric Institute, Henry Ave. & Abbottsford Rd., Philadelphia 29, Pa.
Cooperating group(s): Pennsylvania State Department of Public Welfare.

19-ID-4 FAMILY DEPRIVATION AND CHILD HEALTH: A STUDY OF 10 YEARS' ADMITTANCES TO A CHILDREN'S RESIDENTIAL TREATMENT CENTER FOR EMOTIONAL ILLNESS

Subjects: Total population of children at a residential treatment center.
Methods: Survey focused upon child and family factors associated with admittance for treatment.
Findings: While family deprivation and inadequacy were frequently encountered, maternal deprivation was invariable. Children most seriously deprived appeared to have a higher rate of physical, emotional, and psychosomatic disorders, including school performance. Developmental and emotional abuse appeared to be more significant than physical abuse from the families of this group of children.
Investigator(s): Roger J. Meyer, M.D., Associate Professor of Pediatrics and Preventive Medicine, and C. Ponee, M.S.W., University of Virginia Hospital, Charlottesville, Va.

19-IG-1 AN INSTRUMENT TO EVALUATE AUTISTIC CHILDREN

Purpose: To develop an instrument which can evaluate the status of autistic children and measure the nature and extent of change in their behavior.
Subjects: 80 autistic children.
Methods: On the basis of five years of clinical experience, a research team constructed an instrument which is objective and reliable, and which reflects the complexity of the autistic child's observed behavior. Instrument consists of four core scales which evaluate relationship, mastery, communication, and psychosexual development. Three supplemental scales evaluate social development, intellectual development, and vocalization.
Duration: 1961-not reported.
Investigator(s): Charles Wenar, Ph.D., Associate Professor; Bertram A. Ruttenberg, M.D.; Mitchell L. Dratman, M.D.; and Julia Fraknoi, Ph.D., Department of Psychiatry, University of Pennsylvania School of Medicine, Philadelphia, Pa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A paper describing the instrument in detail has been submitted for publication.

19-IG-2 OPERANT BEHAVIOR OF AUTISTIC CHILDREN

Purpose: To find out how readily autistic children can learn various schedules of reinforcement; and to learn something about their perception of color and form.
Subjects: Currently five autistic children, ages 7 to 11.
Methods: Operant conditioning techniques. The children are started on continuous reinforcement and then moved to fixed ratio, progressing to fixed ratio 100. They are placed on fixed interval and last a DRL schedule.
Findings: The children progress quite rapidly from candy reinforcement to

tokens that are exchanged for various items such as candy and toys. They have little difficulty discerning one schedule from another.
Duration: June 1965-indefinite.
Investigator(s): Marjorie Clos, Ph.D., Research Director, and Michael Einbund, B.S., Research Student, Central Hospital, Louisville, Ky. 40223.

19-IG-3 LEARNED COOPERATION IN THE BEHAVIORALLY-DISTURBED BOY

Subjects: Boys, between the ages of 8 and 14, attending a summer camp for behaviorally-disturbed boys.
Methods: Cooperative behavior will be rewarded over a series of experiences in a game-playing situation which will require that individual responses interlock to win. The game will be played at a table with players sitting face-to-face. The extent to which cooperation thus established is later generalized will be assessed in a second quite different game situation (volleyball). Critical a- or antisocial behaviors manifested in the latter situation will constitute the criteria.
Investigator(s): Paul S. Siegel, Ph.D., Professor of Psychology, and Henry C. Rickard, Ph.D., Assistant Professor of Psychology, University of Alabama, University, Ala.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IG-4 SOME CORRELATES OF PERSONALITY DISORDER AND CONDUCT DISORDER IN A CHILD GUIDANCE CLINIC SAMPLE

Purpose: To derive correlates of Peterson scale and parent-teacher ratings of clinical sample.
Subjects: 79 child guidance clinic cases.
Methods: Questionnaire for parents and teachers, and usual diagnostic procedures.
Duration: May 1962-November 1964.
Investigator(s): Herbert C. Quay, Ph.D., and Robert L. Sprague, Ph.D., Department of Psychology, University of Illinois, Urbana; Arnold L. Miller, Ph.D., Clinical Psychologist, and Harold S. Shulman, Ph.D., Chief Psychologist, Champaign City Mental Health Clinic, 501 E. Springfield, Champaign, Ill.
Cooperating group(s): Champaign-Urbana School System.
Publication: *Journal of School Psychology*.

19-IG-5 CHILDHOOD AND ADULT LIFE EXPERIENCES AS CORRELATES OF ANOMIE

Purpose: To investigate the relative importance of childhood experiences in developing anomie or social disorganization.
Subjects: Males and females from preschool age to late adulthood; juvenile delinquents.
Methods: Questionnaires and interviews to assess childhood experiences.
Findings: Anomie is related, predictably, to childhood experience memories. Experiences that are not conducive to the development of culturally acceptable goals and values are related positively to anomie. Sex differences and relationships to father, mother, brother, and sister differences exist.
Duration: October 1963-June 1966.
Investigator(s): Gunars Reimanis, Ph.D., Chief, Research Psychology Unit,

Veterans Administration Center, Bath; and Professor of Psychology, Corning Community College, Corning, N. Y.
Cooperating group(s): Veterans Administration.
Publication: Journal of Genetic Psychology 106:245-252, 1965; further publication planned. A summary of findings will be available from Bath Veterans Administration Center.

19-IG-6 COOPERATIVE RESEARCH ON JUVENILE SUICIDE AND ITS PREVENTION

Purpose: To discover why the rate of juvenile suicide in Japan is very high in comparison with the rate of juvenile suicide in other countries.
Methods: Statistical study of juvenile suicide; clinical study of juveniles who attempted suicide; socio-psychiatric study of juvenile suicide and attempted juvenile suicide; psychology and psychopathology of child suicide; the suicide of juvenile delinquents; and the prevention of juvenile suicide.
Duration: April 1963-1964.
Investigator(s): Professor S. Yoshimasu, General Institute of Legal Medicine, Tokyo Medical and Dental University, 3, Yushima, Bunkyo-ku, Tokyo, Japan. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1964.)
Cooperating group(s): Central Council on Juvenile Problems, Office of the Prime Minister, Japan.

19-IJ-1 DEMONSTRATION BEHAVIOR DISORDER PREVENTION PROGRAM

Purpose: To establish a program to prevent the development of a specific behavior disorder, enuresis, in a population of children through the use of a special training device; to help evaluate program effectiveness, present study observed changes in the enuresis under the training device, under psychotherapy, and in an untreated control group.
Subjects: 140 enuretic children, boys and girls aged 9 to 11, referred to clinic by their parents.
Methods: 100 children were assigned to a bell training device group, 20 children to psychotherapy, and 20 children to an untreated control group. For the first group, training was terminated after 90 days of treatment or 14 successive days of no wetting; for the second group psychotherapy was given on a once-a-week basis for 90 days and then terminated; and for the third group no treatment was given. For all groups the frequency of bed wetting was recorded several weeks prior to, during, and at termination of treatment. Personality, behavior, and enuresis evaluation is made prior to treatment and one month, six months, and one year following termination of it.
Duration: May 1964-October 1965.
Investigator(s): Richard M. Silberstein, M.D., Director, and Wallace Mandell, Ph.D., Director of Research, Staten Island Mental Health Society, Inc., 657 Castleton Ave., Staten Island 1, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IM-1 AN INVESTIGATION OF PSYCHOSIS IN CHILDHOOD

Purpose: To determine those manifestations that are fundamental to what is meant by "psychosis" when dealing with children in order to contribute to

diagnostic clarity in this field.
Subjects: 50 children in the Child Psychiatry Unit of the Massachusetts Mental Health Center.
Methods: Questionnaires, case study, and interviews of staff.
Findings: Conceptual confusion as well as substantive disagreement is marked in this field. Fundamental to all preadolescent children designated "psychotic", regardless of subclassification, are manifestations indicating bizarreness, marked disturbance of the child's relation to reality, and severe disturbance of object relations.
Duration: 1963-continuing.
Investigator(s): John E. Mack, M.D., and Donald S. Gair, M.D., Senior Staff Psychiatrists, Child Psychiatry Unit, Massachusetts Mental Health Center, Boston, Mass. 02215. (Reported by Gregory Rochlin, M.D., Director, Child Psychiatry Unit.)
Publication: Paper, "An Investigation of the Concept of Psychosis in Childhood," presented at the Seventh Annual Research Conference of Harvard Department of Psychiatry, June 25, 1965.

19-IM-2 A STUDY OF PSYCHOTIC ILLNESS IN CHILDHOOD

Purpose: To assess available diagnostic criteria and classifications and to present a practical method of both at the clinical level; and to investigate toxicity of body fluids.
Subjects: 20 psychotic children; follow-up of hypotheses on 56 psychotic children.
Methods: Admission to hospital for psychiatric, psychological, and physiological assessment; factor analyses on rating data obtained; and biological experiments on test animals using "seizure" pattern as index of toxicity.
Findings: Statistically significant results on increased toxicity in cerebrospinal fluid, serum, and urine of psychotic children.
Duration: January 1963-January 1965.
Investigator(s): Stanley Gold, M.B., D.P.M., Research Fellow, and G. F. Vaughan, M.R.C.P., D.P.M., Research Unit, Guys Hospital, London S.E.1, England.
Publication: Findings will be published as a thesis at the University of Melbourne and as articles in the medical and psychiatric literature during 1965.

19-IP-1 A LONGITUDINAL STUDY OF ADULT SCHIZOPHRENIA

Subjects: 325 persons who were seen in childhood or adolescence at the Judge Baker Child Guidance Center and who were hospitalized and diagnosed schizophrenic as adults. Matched control cases, drawn from the 18,000 children who have been seen at the Center and who have escaped hospitalization will be compared with the schizophrenics.
Methods: Comparisons will be made between the schizophrenic sample and patients hospitalized for character disorders and for depression. Comparisons within the schizophrenic sample will be made between chronic and released patients, males and females, those whose symptomatology was manifested early in life and those whose early lives appeared less disturbed. The three main areas of study will be: (1) hereditary history and family patterns; (2) early developmental patterns; and (3) outcome of illness.
Duration: 1964-1967.
Investigator(s): David F. Ricks, Ph.D., Research Psychologist; Mary L. Waring, M.S.W., Social Service; and Gene Nameche (Ph.D. Candidate, Brandeis

University), Judge Baker Guidance Center, 295 Longwood Ave., Boston 15, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IP-2 RESEARCH AND TREATMENT FOR SCHIZOPHRENIC CHILDREN

Purpose: To contribute to knowledge of schizophrenic children falling in two categories: autistic and symbiotic.
Subjects: Initially a maximum of 15 children, aged 6 to 10 years.
Methods: The plan is to establish a treatment center in a public school carefully chosen for its understanding personnel. Selection of subjects would be based on physical, psychological, psychiatric, and case study information; parents as well as children would be evaluated. A classroom teacher selected for appropriate experience and personality traits would offer a highly structured program of varied activities as suggested by existing research. Other personnel would be brought in as needed. Treatment would be provided by a Mental Health Clinic staff member, and parents would participate in group therapy. A clinic team working closely with the teacher would evaluate the children and their families at least twice a year, and results would be assessed in deciding whether to shift children in regular classrooms, continue them, or discontinue them in the treatment center. The program would be integrated with regular school as much as possible.
Investigator(s): Lewis C. Martin, Ph.D., Coordinator, and Margie R. Lee, M.A., Consultant, Division of Mental Health, Multnomah County Division of Public Health, Health and Education Building, 12240 NE Glisan St., Portland, Oreg. 97230.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IS-1 RESEARCH IN FAMILY THERAPY

Purpose: To determine the effectiveness of family therapy as a method of treating disturbed relationships between children and their parents.
Methods: Clinical and experimental methods with sample of families who present problems with children.
Duration: September 1963-September 1965.
Investigator(s): George Thorman, M.A., Research Director; Marjorie Eaton, A.B.; Karen Buckman, M.A.; and Thomas Biever, M.A., Caseworkers, Family Service Association, 615 N. Alabama St., Indianapolis 4, Ind. (Reported by Henry M. Graham, M.S.W., Executive Director, Family Service Association.)
Publication: To be made available in mimeograph form; probable publication in June 1965.

19-IV-1 APHASIA AND EMOTIONAL DISTURBANCE

Purpose: To remedy lack of communication among many students classified as emotionally disturbed.
Subjects: 12 students in sixth grade, followed through seventh and eighth grades.
Methods: Field trips, and parent conferences.
Findings: Insulted self-concept; lack of confidants; fear and self-distrust;

and social isolation.
Duration: 1964-1966.
Investigator(s): Ann Reid, Ed.D., Coordinator of Special Education, Bryan School, 1134 NW 8th St., Oklahoma City, Okla.
Publication: Available from Oklahoma City Public Schools.

19-IV-2 FAMILY THERAPY OR CHARACTER THERAPY

Purpose: To determine importance of character development in a family setting upon various psychopathologies and schizophrenia, paranoid difficulties, psychoneurotic problems, developmental and personality problems.
Subjects: Children and their parents.
Methods: Clinical findings, attention to the development of family character with multiple therapists serving as parent-substitutes. It seems more helpful in the treatment of schizophrenic, paranoid, and personality disorders than the primary psychodynamic psychotherapies.
Duration: 1948-1966.
Investigator(s): Christian F. Midelfort, M.D., Medical Director; Mary E. Fontaine, M.S.W., Chief Psychiatric Social Worker; and Fred DeWit, Ph.D., Chief Psychologist, LaCrosse County Guidance Clinic, 419-21 Main St., LaCrosse, Wis.

19-IV-3 EFFECTS OF CHANGE IN FREQUENCY OF PSYCHOTHERAPY ON PSYCHOLOGICAL FUNCTIONING OF CHILDREN

Purpose: To investigate effects on the child's psychological functioning of changing the frequency of his psychotherapeutic sessions.
Subjects: Two children with learning disturbance, and their families.
Methods: The plan is to initiate treatment with subjects on a once-a-week basis and then increase the frequency with which the child is seen to four times a week after about a year. Independent observations of the sessions will be made through the use of a one-way screen. The nature of the sample has been carefully delineated and methods for collecting and analyzing the data are available.
Investigator(s): Christoph M. Heinicke, Ph.D., Senior Research Psychologist; Mortimer Meyer, Ph.D., Chief Clinical Psychologist; Rocco L. Motto, M.D., Director; Marshal Wheeler, Ph.D., Psychologist; and Bernice T. Eiduson, Ph.D., Director of Research, Reiss-Davis Clinic for Child Guidance, 9760 West Pico Blvd., Los Angeles, Calif. 90035.
Cooperating group(s): The Grant Foundation.

19-IV-4 WORK REHABILITATION FOR SEVERELY DISTURBED ADOLESCENTS

Purpose: To demonstrate a therapeutic rehabilitation program in the community for severely disturbed adolescents between the ages of 16 and 21, living at home, and unable to profit from continued schooling or to pursue gainful employment.
Methods: Structured group and individual ego-strengthening experiences utilizing clinical-vocational-education team, leading to successful employment.
Investigator(s): Gertrude K. Berman, B.S., Administrative Director; Jacob E. Slutzky, Ph.D.; Irving Chipkin, M.D., Psychiatrist; and Jack L. Herman, Ph.D., Psychologist, Luther E. Woodward School for Emotionally Disturbed

Children, Inc. (formerly The Berman School, Inc.), 66 S. Grove St., Freeport, N. Y. 11520.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IV-5 DEVELOPMENT OF A DAY TREATMENT CENTER FOR CHILDREN

Purpose: To develop an intensive and detailed process of consulting and planning with individuals and existing centers who are known to have experience in the field of day treatment for emotionally disturbed children of preschool and latency age. The addition of a day treatment center to the existing outpatient facility at Reiss-Davis Clinic for Child Guidance is expected to improve the Clinic's present ability to provide a comprehensive program of care for severely ill children.
Methods: A pool of professionals with experience has been developed from which consultants will be drawn for visits to clinic as available. The plan also includes on-site visits to several of the existing day treatment facilities. A Senior Research Psychologist is being added to the staff, charged with specific planning for method of evaluation of the Day Treatment Program and designs and methodology for other research activities within the program.
Investigator(s): Rocco L. Motto, M.D., Director; Bernice T. Eiduson, Ph.D., Director of Research; and Christoph M. Heinicke, Ph.D., Senior Research Psychologist, Reiss-Davis Clinic for Child Guidance, 9760 West Pico Blvd., Los Angeles, Calif. 90035.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IV-6 FOLLOW-UP STUDY OF CHILDREN WHO ATTENDED A CLINICALLY ORIENTED DAY SCHOOL FOR CHILDREN WITH SPECIAL NEEDS

Purpose: To determine subsequent social and academic adjustment in children entering or returning to public school, as a function of habilitative or rehabilitative experiences in a private day school for children with special needs.
Subjects: 75 children who attended Laurence School for more than two years and then entered a public school facility.
Methods: Questionnaire sent: (1) to parents, evaluating child's current academic adjustment, social participation, emotional maturity, and family group adjustment; (2) to child, evaluating his self-concept, relationship with peers, and relationship with family; and (3) to school, evaluating relationship with peers, academic achievement, and emotional maturity. Comparisons to be made between parent and child judgment, parent and school, and child and school. Comparison between attitudes and behavior while at Laurence and currently, by the various observers.
Duration: Spring 1965-spring 1966.
Investigator(s): Lillian B. Vogel, Ph.D., Director of Psychological Services; Marvin Jacobson, A.B., Director; and Sonia Braverman, A.B., Assistant Director, Laurence School, 6428 Woodman Ave., Van Nuys, Calif.

19-IV-7 A STUDY OF THE PROGRESS OF THERAPY WITH CHILDREN WHO ARE BEHAVIOR PROBLEMS

Subjects: Ten boys, aged 8 to 11 years, who manifested behavior problems

and were given group psychotherapy with their mothers.
Methods: Subjects were given group psychotherapy with their mothers.
Findings: It was found that a change in the mother's perception of her boy was accompanied by a decrease in boy's aggressive behavior. In addition, there was some correlation between the boy's behavior in therapy and at home.
Duration: 1959-continuing.
Investigator(s): Keiichi Mizushima, et al., 1300 Mure, Mitaka-shi, Tokyo, Japan. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1964.)
Cooperating group(s): Tokyo-to Central Child Guidance Center; Criminology Research Association.

19-IY-1 RESIDENTIAL PSYCHIATRIC TREATMENT OF CHILDREN

Purpose: To clarify the central purposes and issues in the intensive inpatient treatment of children.
Subjects: Patients of the Children's Hospital, Menninger Clinic (N = 55 to 60), especially the adolescent girls patient group (N = 8).
Methods: Statistical data derived from various sources; patient observation; careful case study; prediction of the effect of planned intervention; etc.
Duration: January 1963-January 1968.
Investigator(s): Edwin Z. Levy, M.D., Staff Psychiatrist, Children's Hospital, Menninger Foundation, Topeka, Kans. (Reported by Robert E. Switzer, M.D., Children's Division, The Menninger Clinic.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-IY-2 THERAPEUTIC ASPECTS OF CONTROL AND DISCIPLINE ON A WARD FOR EMOTIONALLY DISTURBED CHILDREN

Purpose: To describe and analyze disciplinary or controlling practices on a ward for emotionally disturbed children in order to identify their effects on the development of the inner controls necessary for healthy social adaptation.
Subjects: Patients in Children's Ward of the Massachusetts Mental Health Center--12 to 14 boys and girls, aged 4 to 13, with severe neurotic, behavioral, or psychotic problems.
Methods: Clinical observation by ward personnel and child psychiatrists; regular discussion of daily ward practices; consistent recording of various clear-cut disciplinary or controlling practices (such as seclusion); particular focus on several patients, beginning with their admission, for whom usual ward practices are modified for periods of time; and integration of several different vantage points of observation (ward reports, play sessions, school reports, home reports).
Findings: A study of one year's duration has been completed in which seclusion was the only disciplinary practice studied. Findings suggest that seclusion can be effective in fostering the development of inner emotional controls in children if used as part of a significant relationship between nurse (or attendant) and child.
Duration: September 1963-July 1967.
Investigator(s): Donald S. Gair, M.D., Instructor in Psychiatry; Dexter M. Bullard, Jr., M.D., and Jeannette H. Corwin, M.D., Assistants in Psychiatry, Medical School, Harvard University, Cambridge, Mass.
Publication: Article on initial study being prepared, not submitted anywhere as yet. Abstract of paper presented at American Orthopsychiatric Association

meeting has appeared in the March issue of the American Journal of Orthopsychiatry (1965).

19-IY-3 THE PATIENT CAREER

Purpose: It is possible to conceptualize the experiences of persons defined and treated as mentally ill as a temporal sequence of events or "career." The career of the mental patient may be thought of as having three distinct phases: a prepatient phase which describes the person in the community prior to hospitalization; an inpatient phase which describes the patient in the psychiatric treatment center; and a postpatient phase which describes the person as he is back in the community after the experience of hospitalization. The purpose of the study is to explore changes in self-attitudes that accompany this process.
Subjects: First admission patients between the ages of 15 and 20, confined to several Iowa psychiatric hospitals.
Methods: Questionnaire and focused interview. Data to be collected from patients, psychiatrists, and nursing personnel. Case outcome after hospitalization to be measured by length of community tenure and with further patient interviews regarding post-hospital adjustment. Family members will also be interviewed during this phase.
Duration: June 1965-June 1967.
Investigator(s): Stephan P. Spitzer, Ph.D., Assistant Professor, and Norman K. Denzin, B.A., N.I.M.H. Fellow, Department of Sociology and Anthropology, University of Iowa, Iowa City, Iowa.
Cooperating group(s): Iowa Urban Community Research Center; Iowa State Mental Health Authority.
Publication: Series of monographs.

19-IY-4 FOLLOW-UP OF JUVENILE PSYCHIATRIC INPATIENTS RELEASED TO FAMILY

Purpose: To determine extent to which juvenile psychiatric inpatients released to their own or substitute families from the Fulton State Hospital Youth Center have made a successful adjustment in terms of objective criteria (re-institutionalization, delinquency, school attendance, and promotion); and to evaluate prognostic background factors which may predict success-failure in post-hospital outcome.
Subjects: About 100 psychiatric inpatients of normal intelligence (I.Q. above 70), of mixed diagnoses, released (on trial visit or direct discharge) to own or substitute (adoptive, foster, relative) families during the years 1957-1962 before reaching the age of 16, of either sex.
Methods: Obtain from public agencies information on each former patient's re-hospitalization in any psychiatric inpatient facility, incarceration in any correctional facility, delinquency record, school record with respect to truancy, grade-promotion, and continuing in school vs. dropping out; follow-up data coded in gross categories, probably: re-institutionalization, serious delinquency short of re-institutionalization, minor delinquency or school failure or dropout, no delinquency, etc.; analyze statistical relationships between various status and background variables and outcome index.
Duration: September 1964-September 1965.
Investigator(s): William R. Morrow, Ph.D., Research Coordinator, Fulton State Hospital, Fulton, Mo. 65251.

19-IY-5 RESIDENTIAL SCHOOLS FOR DISTURBED CHILDREN

Purpose: To develop and test feasibility of treatment of emotionally disturbed children in residential schools manned by carefully selected young teachers and backed by psychiatrists, psychologists, social workers, and other mental health workers serving as consultants.
Methods: Two schools with associated camps are involved: Cumberland House in Tennessee, and Wright School in North Carolina. Design for testing efficacy of program involves pre- and post-experience evaluations and follow-up at periodic intervals. There are several comparison groups for which comparable data are being obtained.
Findings: In spite of the relatively short period of stay at the schools (four to eight months), current data indicate that schools are having a positive influence on the adjustment of the children, enabling them to return to home and school and to cope adequately.
Duration: Not reported-1968.
Investigator(s): Nicholas Hobbs, Ph.D.; Wilbert Lewis; and Laura Weinstein, Department of Psychology, George Peabody College for Teachers, Nashville, Tenn.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Social deviancy

Note: Some studies appearing in this section were selected from Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency published by the National Council on Crime and Delinquency in New York. Studies thus obtained are noted: (Reported by NCCD.)

19-JG-1 STUDY OF DELINQUENCY AMONG JEWISH YOUTH IN LOS ANGELES COUNTY

Purpose: To reveal extent of delinquency among Jewish youth in Los Angeles County in comparison to that of the general population; and to add to existing body of information regarding nature of delinquent youth and afford descriptive material of the groups under study as well as of the contrasts between them. Study may yield implications for family life education, including the essentials of family strength and the emotional and educational nurture of children.
Subjects: Two groups of slightly more than 100 white delinquent boys residing in Los Angeles County, matched by socio-economic status and age. One group is made up of Jewish and the other group of protestant boys.
Methods: Using the Los Angeles County Probation Department records, the percentage of Jewish boys on whom delinquency petitions were filed over a one-year period is being compared with the percentage of Jewish boys in the total population and with a control group of white protestant delinquent boys. The case histories of the boys have been studied.
Duration: April 1964-June 1966.
Investigator(s): Joy Torstrup McAllister, Ed.D. Candidate, University of California, Los Angeles 24, Calif. (Reported by May V. Seagoe, Professor and Associate Dean, School of Education, University of California.)
Cooperating group(s): Los Angeles County Probation Department.
Publication: Data and results will be available upon completion of the dissertation.

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19-JG-2 EXTENT AND CHARACTER OF DELINQUENCY IN AN AGE COHORT

Purpose: To show extent, nature, and progression of recorded delinquency in an age-cohort, relationship of age to delinquent conduct, age at onset of different forms of delinquency, changes in delinquency as the cohort grows older, variations in elapsed time between delinquencies, etc.

Subjects: Males born in Philadelphia in 1945, or known to be living in Philadelphia before the age of 10, and remaining in that city until their eighteenth birthday.

Methods: Race, intelligence, type of neighborhood, etc. will be studied as they relate to delinquency and nondelinquency. Analysis of delinquent acts will take account of their qualitative nature, and for that purpose a scale permitting the application of weights of seriousness to different delinquent acts will be used. A profile of the delinquency of the cohort will be available for each of its delinquent members and this may provide indications of the point when social action programs should intervene to prevent further or more serious delinquency on the part of this or that class of delinquents.

Duration: Not reported-1966.

Investigator(s): Thorsten Sellin, Ph.D., and Marvin E. Wolfgang, Ph.D., Professors of Sociology, University of Pennsylvania, Philadelphia, Pa. 19104.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-JG-3 STUDIES OF JUVENILE DELINQUENCY IN SAN FRANCISCO

Purpose: To secure data on every juvenile delinquent who came to the attention of the juvenile court and/or the police department of San Francisco during the calendar year 1960.

Subjects: (1) Official juvenile court cases--those cases in which a legal petition was filed; (2) unofficial juvenile court cases--those cases brought to the attention of the court, but for which no legal petition was filed; and (3) police department "warned, but not cited" cases.

Methods: Data were coded, transmitted to punch cards, and machine processed. Analysis was made of a number of variables, including family income, relative deprivation, geographic distribution, educational attainment, employment, racial factors, and age and sex of delinquents.

Duration: April 1961-March 1964.

Investigator(s): Frank M. Moncrief, Research Director, and Jane H. Fator, Social Planning Department, United Community Fund of San Francisco, 2015 Steiner St., San Francisco 15, Calif. (Reported by NCCD.)

Publication: Juvenile Delinquents in San Francisco, 1960: a report to the Committee on Youth, United Community Fund of San Francisco, March 1964.

19-JG-4 JUVENILE DELINQUENCY IN THE PROVINCES OF GRANADA, MALAGA, ALMERIA, JAEN, CENTA, AND MELILLA

Purpose: To ascertain data on characteristics, forms, and etiology of antisocial acts committed by minors in these several Spanish provinces since 1950. These provinces are of particular interest since none has as yet reached the stage of real economic development.

Methods: Data was gathered on each juvenile by means of a questionnaire detailing information on personal characteristics, family, housing, education, time spent in school, type of reading, movies or television enjoyed, residence in an urban or rural environment, etc. Questionnaire was supplemented with data from juvenile courts, reformatories, and other residential children's institutions. For those children whose records could

not be completed in this way, assistants and social workers interviewed the family or the minor himself.
Duration: October 1963-December 1966.
Investigator(s): Jose M. Stampa Braun, and Dr. Jose A. Sainz Cantero, Arabial, 95 (7º A), Granada, Spain. (Reported by NCCD.)
Cooperating group(s): University of Granada; Spanish Ministry of National Education.
Publication: Monographs will be produced on various aspects of the investigation and monographs will be collected and published as a complete study.

19-JG-5 A SURVEY OF JUVENILE TRAINING SCHOOLS IN GEORGIA

Purpose: A survey of training school needs as an aid in planning the programs of these institutions and also to help in interpreting the need for expenditures for personnel and services as well as facilities and equipment.
Methods: Analysis of current statistical information as well as visits to each institution for the purpose of reviewing the current programs in these institutions; evaluation of educational, vocational, treatment, and child care methods and services and physical plants.
Duration: December 1963-June 1964.
Investigator(s): Frederick Ward, Jr., National Council on Crime and Delinquency, Littlefield Bldg., Room 530, Austin, Tex.; and Abraham G. Novick, M.S., Executive Director, Berkshire Farm for Boys, Canaan, N. Y. (Reported by NCCD.)
Cooperating group(s): Georgia State Department of Child and Family Services.

19-JG-6 A SURVEY OF JUVENILE DELINQUENCY IN NORTHERN RHODESIA (ZAMBIA)

Purpose: To explore the problem of juvenile delinquency in Northern Rhodesia, and to identify specific areas for future research.
Methods: Structured interviews with elders in the tribal areas and with urban dwellers are carried out to identify the norms of delinquent and nondelinquent behavior in rural and urban parts of the country. Statistics and other information on juvenile delinquency in Northern Rhodesia since 1939 are considered to show its extent and development. Statistical and case study methods are used to identify causative factors. A survey and assessment is made of social, health, and guidance services as prevention measures.
Duration: November 1963-December 1964.
Investigator(s): W. Clifford, Principal, Oppenheimer College of Social Service, P.O. Box RW. 132, Lusaka, Zambia. (Reported by NCCD.)
Cooperating group(s): Ministry of Local Government and Social Welfare, Northern Rhodesia Government; Mining Groups in Northern Rhodesia; United Nations Section of Social Defense.

19-JG-7 SHORT-TERM TREATMENT OF YOUNG OFFENDERS INVOLVING DEPRIVATION OF LIBERTY

Purpose: To discover the full range of treatments available for young offenders, which of these involve deprivation of liberty, and whether special forms of short-term institutional treatment exist or are proposed.
Duration: 1962-continuing.
Investigator(s): Council of Europe, Division of Crime Problems, Europe

House, Strasbourg, France. (Reported by NCCD.)
Publication: Council of Europe, European Cooperation in 1962, Strasbourg, 1963. (p.227); Council of Europe, XIVth Report of the Committee of Ministers to the Consultative Assembly (Document 1564), Strasbourg, 1963. (pp. 71-72, para. 312).

19-JJ-1 PREDICTORS OF DELINQUENT CONDUCT

Purpose: To study delinquents and their delinquent behavior in order to determine relationships of their social characteristics to type and seriousness of their offenses and to delinquency rates in general; to test and, hopefully, to demonstrate the usefulness of multivariate analysis in criminological research.
Subjects: 263 white, male juvenile delinquents who appeared in a juvenile court in Trenton, New Jersey, between the years of 1937 and 1959.
Duration: January-December 1965.
Investigator(s): Richard S. Sterne, Ph.D., Assistant Professor of Sociology, University of Miami, Coral Gables, Fla.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-JJ-2 THE BUILDING OF AN INSTRUMENT FOR THE ASSESSMENT OF THERAPY EFFECT

Purpose: To develop an instrument for the assessment of the effect of treatment on a group of emotionally disturbed delinquent adolescent males.
Subjects: 40 institutionalized delinquent males and 40 normal controls.
Methods: Instrument consists of a series of tests, each built to measure one or more personality characteristics of the young delinquents. Among the characteristics included are: impulsivity, lack of persistency, suggestibility, lack of parental identification, low self-esteem, and some defense mechanisms. Among the tests used are: Porteus maze test, Feather's persistence test, Autokinetic Effect, Osgood's Semantic Differential, and Level of Aspiration tests.
Findings: The data, as analyzed at present time, indicate that more than half of the 90 variables (all objective scores) discriminate on a significant level between experimental and control group.
Duration: January 1962-1965.
Investigator(s): L. N. J. Kamp; J. T. Barendregt; and J. A. M. Schouten, Scientific Committee, Children's Department, Netherlands Ministry of Justice, Spinoza Str. 7, Amsterdam, The Netherlands. (Reported by NCCD.)

19-JJ-3 THE PREDICTION OF VIOLENCE IN THE COMMUNITY

Purpose: To develop new predictive tools for the diagnosis and evaluation of assaultive and homicidal conduct in juvenile delinquents; and to establish the validity and reliability of violence forecasts.
Subjects: A population of violence-prone juveniles, divided into six basic categories.
Methods: 50 empirically established prediction factors will be validated.
Duration: May 1964-May 1974.
Investigator(s): Dr. Renatus Hartogs, 7 East 86th St., New York 28, N. Y. (Reported by NCCD.)
Cooperating group(s): New York City Youth House; Community Guidance Service

of New York City; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-JJ-4 PREDICTING THE DELINQUENCY OF MIDDLE SCHOOL STUDENTS FROM A RORSCHACH TEST APPLIED BEFORE ENTERING THE SCHOOL

Subjects: 300 students.
Methods: Rorschach given to subjects before they enter school. After an interval of nine years, student's behavior in the middle school was investigated. Their teachers rated them as to kind of behavior.
Findings: Overall rating of Rorschach protocols at the preschool age corresponded with later behavioral characteristics; this was especially true of isolation, wandering, and aggressive traits.
Duration: December 1963-not reported.
Investigator(s): Jun Ichimura, Department of Psychology, Kanazawa University, Ishikawa, Japan. (Reported by NCCD.)
Cooperating group(s): Kanazawa Family Court.

19-JM-1 CLASSIFICATION OF MATERIALS OF "FALCON" FIELD DIARY

Purpose: To identify excerpts in the field diary illustrative of structural and developmental characteristics of a delinquent street gang, and of major problems of practice in attempts to reduce frequency and seriousness of delinquent acts.
Subjects: A single 16-member street gang in an ethnic low-income community of a metropolitan city.
Methods: Classification of field diary materials.
Duration: April 1963-July 1966.
Investigator(s): Solomon Kobrin, M.A., Chief, Division of Social Systems Analysis, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Publication: Monograph.

19-JM-2 THE CRITERIA OF STATUS AMONG ADOLESCENT STREET GANGS

Purpose: To ascertain relationships between certain criteria of group status and the prestige of street gangs in a single neighborhood.
Subjects: Subjects consisted of eight street gangs constituting a network of mutually known and interacting groups in a single low-income neighborhood of a midwestern metropolitan city.
Methods: Identified leaders of each group were interviewed to obtain mutual ratings on a scale of prestige, and justifications of the ratings made. Patterns of justification of specific pretige ratings were subsequently redefined as criteria of status.
Findings: Analysis of ratings and their justifications defined three types of delinquent "style", and raised question concerning adequacy of current "opportunity" theory in accounting for empirically established delinquency patterns in the community investigated.
Duration: November 1961-not reported.
Investigator(s): Solomon Kobrin, M.A., Chief, Division of Social Systems Analysis, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-JM-3 PERSONALITY IN DELINQUENCY: RESPONSE TO TREATMENT

Purpose: To assess predictive validity of measures of four personality dimensions to predict facets of institutional adjustment and post-institutional behavior.
Subjects: 300 consecutive admissions to a boys training school who are capable of reading at the fifth grade level.
Methods: Personality dimensions will be assessed by factor analytically derived personality questionnaires, behavior ratings, and case history analyses. These dimensions will be related to indices of adjustment and behavior while incarcerated and while on post-institution parole.
Duration: September 1964-August 1968.
Investigator(s): Herbert C. Quay, Ph.D., Research Director, Children's Research Center, University of Illinois, Urbana, Ill.; and Robert B. Levinson, Ph.D., Project Director, National Training School for Boys, Washington 13, D. C.
Cooperating group(s): U. S. Department of Justice; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication in appropriate professional journals.

19-JM-4 PERCEPTUAL AND PROBLEM-SOLVING RIGIDITY AS A FACTOR IN RECIDIVISM AMONG JUVENILE DELINQUENTS

Purpose: To determine if there is a relationship between recidivism and inability to adopt flexible modes of behavior in coping with problem situations.
Subjects: Juvenile delinquent males under 18, first offenders and recidivists (those convicted of the same type of offense three or more times). Narcotics offenders are excluded.
Methods: Paper and pencil tests for peceptual flexibility; performance test for perseveration in problem solving; and personality inventory for measure of ego-strength.
Findings: The delinquent group showed significantly less ego-strength than did the comparison group.
Duration: 1962-June 1965.
Investigator(s): Jamie Stewart-Bentley (Ed.D. Candidate, University of California, Los Angeles), Consultant in Research and Guidance, Los Angeles County Superintendent of Schools, Los Angeles, Calif. (Reported by May V. Seagoe, Professor and Associate Dean, University of California, Los Angeles 24, Calif.)
Cooperating group(s): Los Angeles County Probation Department.
Publication: Study will be available as a doctoral dissertation from the University of California, Los Angeles.

19-JM-5 MEDICO-LEGAL PROBLEMS OF JUVENILE DELINQUENCY

Purpose: To discover any distinguishing characteristics in a selected group of juvenile delinquents (murderers in particular).
Methods: Battery of four mental tests (Wechsler-Bellevue, Rorschach, TAT, GGWS); clinical examination; X-rays; and electroencephalographs.
Duration: January-December 1964.
Investigator(s): C. Romano; A. Paolella; B. Pannain; and V. M. Palmieri, Direttore, Instituto di Medicina Legale, Universita di Napoli, Via Luciano Armanni 5, Naples, Italy. (Reported by NCCD.)

19-JM-6 A STUDY OF THE INCIDENCE OF THE DRINKING OF ALCOHOLIC BEVERAGES BY DELINQUENT BOYS COMMITTED TO THE MASSACHUSETTS YOUTH SERVICE BOARD

Subjects: 500 delinquent boys, ages 7 to 17, in the custody of the Massachusetts Division of Youth Service.
Methods: Survey.
Findings: 72 percent of group had had at least one drinking experience; 64 percent had experienced more than one; 10 percent were classified as problem drinkers. Other findings reported in mimeograph by Massachusetts Division of Youth Service bearing title of this study.
Investigator(s): Francis J. Kelly, and John D. Coughlan, Director, Massachusetts Division of Youth Service, 14 Somerset St., Boston, Mass. (Reported by NCCD.)
Cooperating group(s): Alcoholism Clinic, Peter Bent Brigham Hospital; Massachusetts Division of Alcoholism.

19-JM-7 DETERRENTS AND INCENTIVES TO CRIME AMONGST YOUNG PEOPLE

Purpose: To relate extent and nature of teenager's self-confessed delinquent acts, and those of his peers known to him, to the external and internalized incentives and deterrents to commit such acts.
Subjects: Nationally representative sample of males aged 15 to 21.
Methods: Incentives and deterrents to commit crimes will be inferred from variables such as attitudes of persons in the environment; teenager's own attitudes toward "authority", his knowledge of legal penalties, his beliefs about the penalties which would be appropriate for various crimes and delinquencies, and his ratings of such acts on a social-distance scale. Also measured will be the incentives and deterrents which he himself can verbalize.
Duration: 1964-1965.
Investigator(s): H. D. Willcock, Social Survey, Central Office of Information, Westminster Bridge Rd., London, SE 1, England. (Reported by NCCD.)
Cooperating group(s): Home Office.

19-JM-8 CHARACTERISTICS OF JUVENILE DELINQUENTS IN THE REFORMATORY OF ANKARA, TURKEY (COCUK ISLAHEVI)

Purpose: To gather data on characteristics of juveniles imprisoned in Ankara Reformatory. This data will be used in drafting of legislation on juvenile delinquency, on treatment of juvenile delinquents, and on organization and jurisdiction of juvenile courts in Turkey.
Subjects: 130 juvenile delinquents in the Ankara Reformatory.
Duration: March-August 1964.
Investigator(s): M. Lopez-Rey, and N. Franko, UNTAB P. K. 407, Ankara, Turkey. (Reported by NCCD.)
Cooperating group(s): Department of Prison Administration, Turkish Ministry of Justice.

19-JM-9 ATTITUDES OF DELINQUENTS TOWARD AGENCIES OF DELINQUENCY CONTROL

Purpose: To produce and prepare material regarding attitudes of delinquents toward agencies of delinquency control.

Methods: A group of young offenders will be interviewed, and their attitudes assessed immediately on reception at the institution, during their stay there, just before release, and after two months in community. Changes in their attitudes and perceptions will be studied in relation to pre-existing attitudes, specific institution experiences, and their reception on return to the community.
Duration: September 1962-August 1964.
Investigator(s): Brendan A. Maher, Ph.D., and Stanton Wheeler, Ph.D., Center for Research in Personality, Department of Social Relations, Harvard University, Cambridge 38, Mass. (Reported by NCCD.)
Cooperating group(s): Brandeis University; Harvard School of Public Health; Boston University; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-JM-10 WECHSLER INTELLIGENCE SCALE FOR CHILDREN PATTERNING AND DIFFERENTIAL DIAGNOSIS OF READING PROBLEMS OF AGGRESSIVE, DELINQUENT BOYS

Purpose: To ascertain the WISC patterning of a group of delinquent boys with reading problems.
Subjects: 25 boys receiving residential psychiatric care at Floyd Patterson House-Wiltwyck School for Boys, of normal intelligence and two years below expectancy in reading. All were adjudicated delinquent and neglect cases from a low socio-economic group.
Methods: Statistical analysis; F Test; and analysis of variance.
Findings: Error variance was so great that a diagnosis of primary reading disability is unwarranted by WISC patterning.
Duration: September 1963-February 1964.
Investigator(s): Paul S. Graubard, Wiltwyck School for Boys, Inc., 260 Park Ave. South, New York, N. Y. 10010. (Reported by NCCD.)

19-JM-11 JUVENILE DELINQUENTS AND THEIR ABNORMAL EEG PATTERNS

Purpose: To discover why delinquents with abnormal EEG patterns were 85 percent habitual criminals when only 39 percent of normal delinquents were habitual criminals.
Subjects: 25 delinquents who showed the 14 and 6 c-s positive spikes pattern. 21 of them were habitual criminals.
Methods: Investigation of offense history; psychological tests; and medical history of subjects.
Findings: It seemed that there was little relationship between intelligence and the EEG pattern. Delinquents showing this EEG pattern were characteristically "E" type on the Kraepelin Performance Test. The medical history of the 25 delinquents examined did not show the pattern supposed to be related to this EEG pattern. Clinical complaints were mainly slight disorders of autonomic nervous system and hormone system.
Duration: April 1960-March 1964.
Investigator(s): Tsutomu Ishihara, 698 Tadeicho, Sakai-shi, Osaka-fu, Japan. (Reported by NCCD.)
Cooperating group(s): Osaka Juvenile Detention and Classification Home; Second Physiology Section, Department of Medicine, Osaka University; Laboratory of Department of Medicine, Tottori University.

19-JM-12 STUDY OF THE HEREDITARY MOTOR CONSTITUTION OF JUVENILE DELINQUENTS IN RELATION TO CRIME COMMITTED

Purpose: To study fundamental types of motor activity among juvenile delinquents; and to check whether a particular type of individual motor constitution influences the choice of means and tools used in committing a crime.

Duration: March 1963-continuing.

Investigator(s): Professor Paolo Manunza, Director, Institute of Legal Medicine, University of Bologna, Via Irnerio 49, Bologna, Italy. (Reported by NCCD.)

Cooperating group(s): Center for the Reeducation of Juvenile Delinquents of Bologna.

19-JM-13 RESEARCH ON EXPRESSIVITY IN LANDSCAPE DRAWING FROM IMAGINATION AND ON COLOR PREFERENCE AMONG JUVENILE DELINQUENTS

Purpose: To show that, in landscape drawing from imagination, there exists, independent of subjects' drawing skill, a fundamental difference between those making simple landscapes containing simple, essential lines, and no people, and those making detailed and crowded landscapes, which burst with details, indicate multiple perspectives, and have representations of people and animals in them; and to clarify and point out other differences and preferences with introverts tending to use cold colors and extroverts, warm ones.

Subjects: Juvenile delinquents maladapted to the environment in which they have been raised, who show character disorders.

Duration: March 1963-continuing.

Investigator(s): Professor Paolo Manunza, Director, Institute of Legal Medicine, University of Bologna, Via Irnerio 49, Bologna, Italy. (Reported by NCCD.)

Cooperating group(s): Center for the Reeducation of Juvenile Delinquents of Bologna.

19-JM-14 THE JUVENILE DELINQUENT'S SELF-CONCEPT AND HIS CONCEPT OF SOCIETY

Purpose: The young delinquent has a concept of the social universe, and of himself as a member of society, in which he is a socially incompetent being who feels ostracized by a reproachful and suspicious society. He is so firmly anchored in this concept that it appears to him to be his inescapable destiny. He chooses the delinquent identity as the only possible outlet. Starting from these hypotheses, the objective is to construct diagnostic and other instruments in order to find out how this feeling of incompetence and this negative identification develops in each individual delinquent. It is also hoped that useful instruments for the diagnosis and prognosis of young delinquents and predelinquents with a view to reeducation can be constructed.

Subjects: A group of 80 delinquents, 15 to 20 years of age, and a control group of 50 nondelinquents.

Methods: Qualitative as well as quantitative elaboration of the material obtained is foreseen.

Duration: 1963-1965.

Investigator(s): Francois Belpaire, and Rene Dellaert, 39 Ouest Blvd., Gouin, Montreal, Que. (Reported by NCCD.)

Cooperating group(s): Center of Research in Human Relations, Montreal; Boscoville; Aquinas Fund.

Publication: Canadian Journal of Corrections 6:1:58-64, January 1964.

19-JM-15 INQUIRY ON THE RELATION BETWEEN FAMILY STRUCTURE, SOCIO-ECONOMIC CONDITIONS, LEVEL OF EDUCATION, AND THE CRIMINAL BEHAVIOR OF MINORS

Subjects: 1,000 minors distinguished by the irregularity of their conduct and for whom a criminal career can be predicted.
Methods: Collection of medical, psychiatric, psychological, social, and economic data on the family structure of subjects.
Duration: 1963-continuing.
Investigator(s): Dr. Francesco Introna, Instituto di Medicina Legale e delle Assicurazioni, Via Falloppio 16, University of Padua, Padua, Italy. (Reported by NCCD.)
Cooperating group(s): Instituto di Medicina Legale, University of Padua; National Council for the Moral Protection of Young Boys.

19-JM-16 ENVIRONMENTAL OBSERVATION OF CHILDREN COMMITTED TO A CHILD EDUCATION AND TRAINING HOME

Subjects: All delinquent children committed to the Shutoku Child Education and Training Home from March 1954 to August 1959.
Methods: Basic data and statistics were collected on subjects and on delinquency in Osaka City in general.
Duration: March 1954-March 1964.
Investigator(s): Hidenobu Watahabe, Osaka-Furtisu Shutoku-Gakuin, 813 Takaida, Kashiwabara-shi, Osaka-fu, Japan. (Reported by NCCD.)
Cooperating group(s): Shutoku Child Education and Training Home, Osaka Prefecture; Kinki District Child Education and Training Council.
Publication: "Kyogo", No. 105, 1960 (published by Zenkoku Kyogo Kyogikai).

19-JM-17 ESSAY ON GANGS: AN ESSAY ON THE SOCIOLOGICAL AND PSYCHO-SOCIOLOGICAL SIGNIFICANCE OF ADOLESCENT GROUPS

Purpose: Study of adolescent gangs (including, eventually, school gangs and young adults) considered in the vast framework of the problems of adolescents in a society from a sociological and psycho-sociological perspective.
Methods: Contact with different specialists of adolescent groups; utilization of the monograph "Camille Jullian" on contact between a group of adolescents and a street gang; utilization of statistical studies by CFD-ES at Vaucresson; and systematic analysis of different projects and studies in France on the problem.
Duration: 1963-1964.
Investigator(s): Ph. Robert, 19 Rue de Segur, Bordeaux, Gironde, France. (Reported by NCCD.)
Cooperating group(s): Department of Sociology, School of the Humanistic Sciences, University of Bordeaux; Groupe d'Ethnologie Sociale; Groupe de Sciences Sociales de la Jeunesse.
Publication: Robert, Ph., Revue Internationale de Criminologie et de Police Technique (Geneva).

19-JM-18 STANDARDIZATION OF A GROUP BENDER-GESTALT METHOD OF ADMINISTRATION IN A POPULATION OF "COURT-LABELLED" DELINQUENT BOYS

Purpose: To standardize a group Bender-Gestalt technique of administration

in such a manner that group-administered figure reproductions will not differ significantly in size from reproductions resulting from individually-given cards; and to test the hypothesis that there is an optimum ratio of approximately 1:6 between size of individual Bender-Gestalt patterns and group figures which, when used, will result in no significant size difference between individual and group-administered reproductions.
Subjects: Court-labelled delinquent boys.
Methods: Group cards of different ratios to Standard Bender-Gestalt stimuli were presented to subjects and effect of these to standard Bender-Gestalt patterns were compared with differences, as far as size is concerned, which exist between group and individually-administered Bender-Gestalt figure reproductions.
Duration: March-June 1964.
Investigator(s): Richard G. Doiron, and Russell H. Levy, Ph.D., Director of Clinical Services, Reception and Diagnostic Center, Illinois Youth Commission, Box 1502, Joliet, Ill. (Reported by NCCD.)
Cooperating group(s): Department of Psychology, Loyola University Graduate School.

19-JM-19 CROSS-SECTIONAL PSYCHOMETRIC EVALUATION OF "COURT-LABELLED" DELINQUENT BOYS

Purpose: To effect a comprehensive professional evaluation between total assets and needs of a particular youth and the most adequate programs operative within the Youth Commission.
Subjects: 904 Negro and white delinquent boys, inmates of the Reception and Diagnostic Center of Illinois Youth Commission.
Methods: Collection of data by use of a group psychometric testing program and from individual administration of the WISC and/or WAIS tests. From 2,641 sets of data, mean I.Q. values and standard deviations have been set forth chronologically for each of six psychometric tests. Progressive methods and practices of correctional containment, embodying the de-emphasis of severe external control security measures, provided an acceptable environment in which to pursue the study.
Duration: January 1963-December 1964.
Investigator(s): Russell H. Levy, Ph.D., Director of Clinical Services; Walter J. Grenier; Raymond M. Daly; and Richard G. Doiron, Reception and Diagnostic Center, Illinois Youth Commission, Box 1502, Joliet, Ill. (Reported by NCCD.)

19-JM-20 DEFINITION OF FREE CHOICE BY "COURT-LABELLED" JUVENILE DELINQUENTS AND ITS RELATION TO THE COMMITTING OFFENSE

Purpose: To discover a definition of free choice by court-labelled delinquent boys and relate that definition to the most recent illegal activity of the boy.
Subjects: 26 delinquent boys between the ages of 13 and 17, selected randomly from staff lists at the Reception and Diagnostic Center of the Illinois Youth Commission.
Methods: Theoretical and practical aspects of free choice were discussed and results categorized in terms of content, level of abstractness, and level of personal need expressed.
Findings: Results indicated that every subject felt that free choice was open to him, but as the discussion noted free choice exists in degrees, and is influenced by many variables. Probably not every subject exercised his full responsibility regarding free choice.
Duration: November 1963-February 1964.

Investigator(s): Dale LeNoue and Russell H. Levy, Ph.D., Director of Clinical Services, Reception and Diagnostic Center, Illinois Youth Commission, Box 1502, Joliet, Ill. (Reported by NCCD.)
Cooperating group(s): Department of Psychology, Loyola University Graduate School.

19-JM-21 AN ATTEMPT TO RELATE CERTAIN HOUSE-TREE-PERSON (HTP) AND BENDER VISUAL MOTOR GESTALT (BVMG) TEST FINDINGS TO COMMITMENT OFFENSES OF "COURT-LABELLED" JUVENILE DELINQUENT BOYS

Purpose: To test hypothesis that some significant correlation exists between certain HTP and BVMG test results produced by juvenile delinquents and the relative magnitude of the commitment offense.
Subjects: 16-year old "court-labelled" juvenile delinquent wards of the Illinois Youth Commission.
Methods: Each group of subjects administered HTP was studied for presence of pathway to House, absence of door to House, and whether a male was drawn as first human figure. Each group administered BVMG was studied for specific instances of pattern collision. Various criminal offenses will be compared to test data.
Duration: January 1963-continuing.
Investigator(s): Russell H. Levy, Ph.D., Director of Clinical Services, Reception and Diagnostic Center, Illinois Youth Commission, Box 1502, Joliet, Ill. (Reported by NCCD.)

19-JV-1 SELF-HELP PROJECT FOR YOUTHFUL DRUG USERS

Purpose: An experimental self-help project for youthful drug users who want to cure their addiction. Ultimate goal is to determine feasibility of establishing a halfway house-type community center for the prevention, treatment, and rehabilitation of youthful narcotic addicts.
Methods: Voluntary recruits from halfway houses, medical facilities, state correctional institutions, and county jails will congregate at the Add-Center to discuss their common problems. A research staff consisting of criminologists, graduate students, and former narcotic addicts will observe and counsel these young addicts and members of their families; and various community supportive services--legal, medical, psychiatric, educational, employment and welfare--will be available to members.
Duration: July 1965-June 1966.
Investigator(s): Herbert Blumer, School of Criminology, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-JV-2 AN EXPLORATORY STUDY OF NARCOTIC CONTROL PROGRAM FOR YOUTH AUTHORITY PAROLEES

Purpose: To study development and operation of the Youth Authority's Narcotic Control Project in Los Angeles, with special emphasis on techniques of intensive parole supervision, systematic nalline testing, and regular group counseling, and present statistical material on significant aspects of parole progress.
Subjects: Male Youth Authority wards who have histories of narcotic addiction and are released on parole have been assigned to special narcotic

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caseloads. A total of 135 such wards are involved in study.
Methods: Information available to project parole agents will be used to study etiology and epidemiology of narcotics addiction.
Duration: 1962-continuing.
Investigator(s): George F. Davis; William E. Cook, Ph.D.; and Keith S. Griffiths, Ph.D., California Department of the Youth Authority, 401 State Office Building No. 1, Sacramento 14, Calif. (Reported by NCCD.)

19-JV-3 OBSERVATION OF CHARACTER STRUCTURE OF JUVENILE SEX OFFENDERS

Subjects: 25 juvenile sex offenders at Morioka Juvenile Prison.
Methods: Rorschach tests.
Findings: 16 of the 25 cases have only one parent; in most cases, the father is the parent they are lacking. Results of the Rorschach test show that in general subjects have feelings of inferiority, anxiety, and a confusion of sexual impulses; also they are timid, impulsive, immature, and want sympathy and attention.
Duration: July 1962-July 1965.
Investigator(s): Shoji Sanjo, Department of Psychiatry, Iwate Medical College, 87 uchimaru, Morioka-shi, Iwate-ken, Japan. (Reported by NCCD.)
Cooperating group(s): Department of Psychology, Iwate Medical College.

19-JY-1 PHYSICAL CRUELTY IN URBAN AND RURAL DELINQUENTS, AND IN NORMAL BOYS

Purpose: To assess past cruel behavior towards humans and animals in above groups.
Subjects: Twenty rural delinquents, urban delinquents, and normal boys, ages 12 to 16, matched for I.Q. and socio-economic status.
Methods: Interview.
Duration: June-August 1965.
Investigator(s): F. R. Wake, Ph.D., Associate Professor of Psychology, Carleton University, Ottawa, Ont.
Cooperating group(s): Hon. F. A. McGrand, Senate of Canada.
Publication: Expect to publish in the Canadian Psychologist. Two previous articles on the same topic have already been published in this journal.

19-KA-1 CROSS-CULTURAL STUDY OF YOUTH

Purpose: To determine if there is any real differentiation in terms of personality problems between the boy who has no police or court record in contrast to those who have come in conflict with the law.
Subjects: Boys from three ethnic groupings in three cities: Puerto-Ricans from New York; whites from Chicago; and Negroes from Washington, D. C.
Methods: Selection of blocks because of their vulnerability; all families interviewed for census identification; total clearance of family structure obtained; depth interviews with children and youths; resident observers utilized; and records of the following were analyzed; school, welfare, police blotters, correction, juvenile aid bureau, courts, social service clearance, and penal institutions.
Duration: January 1963-June 1965.
Investigator(s): Bernard Lander, Ph.D., Associate Professor of Sociology, Hunter College, and Director of Research, Lavanburg-Corner House, 30 E. 42nd St., New York 17, N. Y. (Reported by Frank J. Cohen, Executive Director,

Lavanburg-Corner House.)
Cooperating group(s): Howard University; Hunter College; and University of Notre Dame.
Publication: Upon completion of the study, it is planned to print a report for national distribution.

19-KA-2 ADOLESCENT MORALITY AND JUVENILE DELINQUENCY: A PSYCHO-CULTURAL STUDY OF MORAL VALUES OF ADOLESCENTS OF A DISTRICT IN MONTREAL

Purpose: To test the hypothesis that given an affluent society in which the material possibilities of achieving a satisfactory status are virtually available to everyone, thanks to free education and community services, it is the sensitivity to different values transmitted by various milieus which engender delinquent or normal behavior, and that sensitivity to values develops more specifically in a particular climate created by family and takes into account the age, level of schooling, socialization, etc.
Subjects: Three groups from a district of Montreal: 225 adults (200 parents and 25 teachers); 250 male adolescents, aged 13 to 18, representing all the adolescent population of the district; and 100 boys between the ages of 6 and 10.
Methods: Administration, by interview, of a questionnaire inspired by those of Scott, Morris and McCord, pertaining to the three levels of analysis: preferential values, moral values, and motivation of behavior.
Findings: Pilot study accomplished in 1964 and 1965 showed that the peculiar value system of delinquent adolescents can be identified with proper measurement.
Duration: June 1965-June 1967.
Investigator(s): Denis Szabo, D.Sc., Director, and Francyne Goyer, M.A., Lecturer, Department of Criminology, University of Montreal, Montreal 24, Que.
Cooperating group(s): Canadian Council on Urban and Regional Research; Department of Family and Social Welfare, Province of Quebec.
Publication: Results of pilot study are in press at *l'Annee Sociologique*, (Paris) Vol. 1964-1965.

19-KA-3 A LONG TERM STUDY OF THE ORIGINS AND DEVELOPMENT OF BEHAVIOR PROBLEMS IN SCHOOLBOYS

Purpose: To investigate associations between personal and background characteristics at an early age and adjustment at adolescence, with special reference to development of juvenile delinquency.
Subjects: 400 school boys, aged 8 to 9, attending state schools within a one-mile radius of an office located in a working-class neighborhood in a large city.
Methods: Cognitive and personality tests, teachers' reports, and physical measures of the boys; home interviews with parents by psychiatric social workers; and data from social and medical records and agencies.
Duration: 1961-1969.
Investigator(s): D. J. West, M.D., D.P.M., Assistant Director of Research, and H. B. Gibson, Ph.D., Research Officer, Institute of Criminology, 7 West Rd., Cambridge, England.
Publication: Expect interim report as monograph in Cambridge Criminology Series, 1967.

19-KA-4 NATIONALITY AND DELINQUENCY

Purpose: To determine extent to which rates of delinquency vary among ethnic, nativity, and racial groups; and to determine extent to which observed differences are products of differential distribution among different types of city areas.
Duration: September 1964-not reported.
Investigator(s): Henry D. McKay, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by NCCD.)
Cooperating group(s): Illinois State Department of Mental Health.

19-KA-5 MASS MEDIA AND JUVENILE DELINQUENCY

Purpose: An inquiry into the relationship between mass media and juvenile delinquency.
Methods: A questionnaire was sent to member countries designed to elicit information about what measures of control existed to protect juveniles from harmful influences in the mass media, how such controls were applied in practice and with what effect, and finally, what scientific studies had been conducted on this question.
Duration: 1962-continuing.
Investigator(s): Council of Europe, Division of Crime Problems, Europe House, Strasbourg, France. (Reported by NCCD.)
Publication: Council of Europe, European Cooperation in 1962, p. 226, and XIVth Report of Committee of Ministers to Consultative Assembly, Strasbourg, 1963 (p.73).

19-KA-6 CHARACTERISTICS OF REJECTING FAMILIES AND THEIR INSTITUTIONALIZED DELINQUENT CHILDREN

Purpose: To study characteristics of institutionalized delinquent children who are completely and overtly rejected by their families, and their families.
Subjects: In-residence cases in institution on December 31 in years 1959 through 1962. These are children who receive not a single card, letter, gift, or visit from home during Christmas holidays. The rest of the institution population either go home on furlough or remain behind but receive letters and gifts.
Methods: Families and their respective delinquent children will be studied utilizing IBM cards from admission and release forms.
Duration: March 1963-continuing.
Investigator(s): Robert Stuckert; Gordon Shipman; and Dean V. Babst, Social Research Analyst, Bureau of Research, Division of Corrections, Wisconsin State Department of Public Welfare, 1 W. Wilson St., Madison, Wis. 53702. (Reported by NCCD.)
Cooperating group(s): University of Wisconsin, Milwaukee.

19-KD-1 DELINQUENCY CONTROL STUDY

Purpose: To derive empirical information about ways in which law enforcement officers, probation officers, delinquent and nondelinquent adolescents perceive their own and each other's roles.
Subjects: 668 police officers from 55 municipal police departments in

Washington; 419 probation officers from 39 county juvenile probation departments in Washington; and 400 adolescents from two Seattle high schools.
Methods: Questionnaires.
Duration: September 1962-August 1965.
Investigator(s): Peter G. Garabedian, Ph.D., Associate Professor and Chairman, Department of Sociology, Washington State University, Pullman, Wash.
Cooperating group(s): President's Committee on Juvenile Delinquency and Youth Crime.
Publication: "The Control of Delinquent Behavior by Police and Probation Officers," paper read at the annual meeting of the Society for the Study of Social Problems, August 30, 1964 in Montreal.

19-KD-2 EXPERIMENTAL USE OF EX-GANG LEADERS AS DETACHED WORKERS IN A YOUTH SERVICE AGENCY

Purpose: A pilot project to test the effectiveness of on-the-job training for five ex-gang leaders working as detached workers in the Youth for Service Agency. It is hoped to demonstrate that these ex-gang leaders can work effectively in such an agency setting, thus providing a new source of needed personnel, and that their experience can provide sharpened training materials and curricula.
Duration: February-July 1965.
Investigator(s): Robert Stone, Ph.D., Institute for Social Science Research, San Francisco State College, 1600 Holloway, San Francisco, Calif.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-KD-3 JUVENILE DELINQUENCY PREVENTION IN CHICAGO: A PROJECT OF THE JOINT YOUTH DEVELOPMENT COMMITTEE

Purpose: To revitalize the process of social control and socialization so that urban residents in one community can be effectively related to people, auspices, and institutions that open opportunities for a better urban life. Such a community promises a meaningful environment for youth and a bulwark against juvenile crime.
Subjects: Children in the community at critical, career-turning points (ages 3 to 6, 12 to 14, and 16 to 18).
Methods: Decentralization of public and private institutional services for the demonstration area through seven programs--education, employment, law enforcement and corrections, health, housing, leisure-time activities, and family neighborhood services; nurturing of a sense of community; renewal and strengthening of institutions; contracting of services through organizations, local and city-wide; and enlistment of full-scale participation of residents on a paid and volunteer basis.
Duration: May 1964-indefinite.
Investigator(s): Charles P. Livermore, Director, and Milton Hyman, M.A., Joint Youth Development Committee, 185 North Wabash Ave., Chicago, Ill. (Reported by NCCD.)
Cooperating group(s): President's Committee on Juvenile Delinquency and Youth Crime.

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19-KG-1 COMMUNITY TREATMENT FOR DELINQUENTS, PHASE 2

Purpose: Phase 1 of the Community Treatment Project: (1) demonstrated feasibility of substituting an intensive community program for institutionalization of serious delinquents; (2) showed experimental community group to have a higher parole success rate and more positive test score changes (delinquency attitudes) than control institutionalized group; and (3) developed a differential treatment model, defining nine subtypes of delinquents and predicted most effective treatment interventions for each subtype. Phase 2 further describes elements of community program and treatment model, and attempts to delimit aspects of the program most related to success.
Subjects: Delinquents committed to the Youth Authority from two large urban areas.
Methods: Subjects were randomly assigned to one of three groups: E_1, a community unit using differential treatment model; E_2, a community unit following the model of Dr. LaMar Empey's Provo Experiment (Bulletin 6, *Research Relating to Children*); and C, the traditional institution program. Research staff studied comparative effectiveness of three alternative programs in reducing recidivism and in bringing about attitudinal and behavioral changes in various delinquent subtypes.
Investigator(s): Marguerite Q. Warren, Ph.D.; Ted Palmer, Ph.D.; and James K. Turner, Community Treatment Project, California Department of the Youth Authority, 4420 Third Ave., Sacramento 19, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-KG-2 JUVENILE COURT, LAW ENFORCEMENT, AND DETENTION NEEDS IN PINELLAS COUNTY, FLORIDA

Purpose: To determine present status of services and needs for additional facilities and staff; also, to review current policies and practices and to develop suggested changes for more effective service.
Duration: November 1963-May 1964.
Investigator(s): Don Rademacher, Field Consultant, National Council on Crime and Delinquency, Littlefield Bldg., Austin, Tex. (Reported by NCCD.)
Cooperating group(s): Pinellas County Juvenile Court; Pinellas County Juvenile Welfare Board; Pinellas County Junior Chamber of Commerce.

19-KG-3 NATIONAL COUNCIL OF JUVENILE COURT JUDGES: JUDGE-CHILD COMMUNICATIONS STUDY

Purpose: To investigate the young offender's reaction to and understanding of juvenile court proceedings, judge's behavior, and court setting; to lay bare dynamics and results of judge-boy communication and their correspondence with intentions and institutional goals of court.
Methods: Perceptions of juvenile delinquents as well as judge and key court personnel will be studied in two or three courts exhibiting a variety of characteristics in terms of procedure, degree of informality, type of hearing, etc. Special focus will be efficiency and character of communication between judge and child, with identification and analysis of significant variables with respect thereto. Personal interviews (before and after hearing), projective tests, courtroom observation, and follow-up techniques will be used to determine character and accuracy of perceptions, their effect, and implications for structuring and operation of juvenile court process.
Duration: August 1964-August 1965.

Investigator(s): Richard D. Schwartz, Ph.D.; Paul D. Lipsitt, M.S.; and Daniel L. Skoler, National Council of Juvenile Court Judges, American Bar Center, 1155 East 60th St., Chicago 37, Ill. (Reported by NCCD.)
Cooperating group(s): National Council of Juvenile Court Judges; Northwestern University Law and Social Science Program; Walter E. Meyer Research Institute of Law.

19-KG-4 ASSESSMENT OF INTENSIVE PROBATION SUPERVISION OF HARD-TO-PLACE GIRL DELINQUENTS

Purpose: To cope with problem of "hard-to-place" female juvenile court wards accumulating in Juvenile Hall while awaiting suitable placements by assigning them to intensive probation supervision.
Subjects: Four groups of girls, 10 to 15 in each group. These girls exhibited, psychometrically, greater maladjustment than typical girl in either short-term or long-term treatment for disturbed delinquent girls maintained by the Department.
Methods: Four experienced woman deputy probation officers were assigned to the four caseloads. The officers worked with the child, the natural or foster parents, siblings, and other significant persons in effecting workable adjustments to community. Assessment is being carried out by before-after measurements that include repeated administration of a psychological inventory, completion of a performance schedule, submission of quarterly recordings, and analysis of detention histories. Recidivism records of intensive caseload subjects will be compared with those of matched cases from other programs in the Probation Department.
Duration: October 1963-October 1964.
Investigator(s): Stuart Adams, Ph.D., Research Director, and Calvin C. Hopkinson, M.S.W., Los Angeles County Probation Department, Box 4002, Terminal Annex, Los Angeles 54, Calif. (Reported by NCCD.)

19-KJ-1 RESTORATION OF YOUTH THROUGH TRAINING

Purpose: To evaluate efficacy of an IBM skills training program coupled with literacy training, self-management counseling, family referral service, and placement in jobs of known critical manpower shortages on reduction of chronic unemployment and recidivism among young inmates to be released from custody of New York City Department of Correction.
Subjects: 300 youths, randomly selected from a universe of about 3,000 16- to 21-year old inmates committed in a year's time to custody of New York City Department of Correction. Subjects are randomly assigned to experimental group of 150 and matched control group of equal size.
Methods: At seven intervals of two months duration each, approximately 20 to 25 experimental subjects, two months before their scheduled release from custody will be provided with: (1) a 5 to 6 hour per day, 22 day IBM training program; (2) a work program on IBM machines for about 22 days; (3) self-management counseling; (4) family referral services; (5) intensive two hours a day, six days a week program in literacy skills; and (6) vocational placement on IBM skills jobs immediately following release from custody. Quantitative and qualitative research methods will be used to answer several questions concerning efficacy of program.
Duration: November 1963-June 1965.
Investigator(s): Sol Chaneles, Ph.D., Director, Research and Planning Division, New York City Department of Correction; and Harry M. Shulman, Ph.B., Professor of Sociology, The City College, City University of New York, New York, N. Y. (Reported by NCCD.)

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Cooperating group(s): International Business Machine Corporation; Office of Manpower, Automation, and Training, U. S. Department of Labor.

19-KJ-2 VOCATIONAL REHABILITATION IN JUVENILE DELINQUENCY

Purpose: To gather basic information regarding scope and extent of problem of juvenile delinquency in Oklahoma, resources available in dealing with it, and ways in which various agencies can be more effective in coping with it; and to define role of vocational rehabilitation in this area.
Duration: July 1963-June 1964.
Investigator(s): James A. West, Chief of Special Services, and Don Keith, Vocational Rehabilitation Division, Oklahoma State Board for Vocational Education, State Capitol Station, Oklahoma City 5, Okla. (Reported by NCCD.)
Cooperating group(s): Vocational Rehabilitation Adminstration, U. S. Department of Health, Education, and Welfare.

19-KM-1 ADDITIONAL PROCESSES IN CONTINUING CLASSES AT JUVENILE HALL

Purpose: To determine whether or not classes at Juvenile Hall can accompolish remedial education in basic subjects or a change of attitude; to assess the role of group counseling as a factor in re-education.
Subjects: Those committed to Juvenile Hall for detainment of 30, 60, or 90 days.
Methods: Pretesting to determine range of abilities and capacities and aptitudes in reading, writing, arithmetic, and language arts: adjusting curriculum to meet needs on an individual basis; and grouping for instruction.
Duration: January 1964-June 1966.
Investigator(s): Ernest Poore, B.A., Assistant Superintendent, Fresno County Schools, 2314 Mariposa St., Fresno, Calif. 93721.
Cooperating group(s): Superior court judge; Juvenile Justice Commission; county probation officer.
Publication: Data available from investigator upon request.

19-KM-2 USE OF OPERANT TECHNIQUES TO IMPROVE THE SCHOOL PERFORMANCE OF A GROUP OF INSTITUTIONALIZED DELINQUENT BOYS

Purpose: To develop motivation for improved academic performance.
Subjects: 19 institutionalized boys ages 13 to 15 committed by the State of Washington.
Methods: Five evenings a week boys in an institutional living unit were given an opportunity to watch a television news program. The following day in school they were given a 10-item, true-false test based on contents of this program. Grades on this test were made available to them on special grade sheets. The youngsters returned to living unit in the afternoon with these grade sheets and were paid in tokens depending upon their performance on this test. Tokens were redeemable for usual institutional canteen items, candy, gum, etc.
Findings: The group showed a statistically significant ($P < .01$) improvement in test performance for the 24 days on this program as compared with a previous period when reinforcement was not contingent on this behavior.
Duration: January-August 1965.
Investigator(s): Vernon O. Tyler, Jr., Ph.D., Chief Psychologist, and

G. Duane Brown, M.A., Research and Clinical Psychologist, Fort Worden Treatment Center, Port Townsend, Wash.
Publication: Paper planned for reading at a psychological meeting and for later publication.

19-KM-3 THE IMPACT OF SWIFT, BRIEF ISOLATION ON DELINQUENT BEHAVIOR

Purpose: To develop a procedure for controlling unacceptable behavior of institutionalized delinquent youngsters using swift, mild punishment.
Subjects: Institutionalized delinquent boys ages 13 to 15 committed by the courts of the State of Washington.
Methods: Pool table misbehavior (breaking rules, throwing cue, scuffling) of boys in a training school cottage was controlled by making isolation contingent on it. Cumulative records from an ABA (isolation; verbal reprimand; isolation) contingency design showed decreasing rate during A and rapid recovery during B.
Findings: The contingency controlled misbehavior, but resistance to extinction and generalization to other behaviors and situations outside the cottage remain for study.
Duration: May 1964-July 1965.
Investigator(s): Vernon O. Tyler, Jr., Ph.D., Chief Psychologist, and G. Duane Brown, M.A., Research and Clinical Psychologist, Fort Worden Treatment Center, Port Townsend, Wash.
Publication: Currently in mimeograph form. Accepted for reading at American Psychological Association Convention, Chicago, 1965. Plan to publish later.

19-KM-4 USE OF OPERANT TECHNIQUES TO IMPROVE THE ACADEMIC PERFORMANCE OF A SCHOOL-RESISTANT DELINQUENT BOY

Purpose: To develop improved academic performance in a delinquent boy.
Subjects: One manipulative, delinquently-identified, 16-year old boy with an I.Q. of 108 committed for stealing four cars. Reports state he feels "dumb" in school and resists it.
Methods: Daily and weekly school grades were reinforced with tokens exchangeable for "renting" a mattress, preferred clothing, and canteen "goodies."
Findings: With reinforcement, semester grades improved from .825 to 3.00. Teachers reported subject worked hard for tokens despite school-resistant attitude.
Duration: June 1964-April 1965.
Investigator(s): Vernon O. Tyler, Jr., Ph.D., Chief Psychologist, Fort Worden Treatment Center, Port Townsend, Wash.

19-KM-5 A COMBINED HALFWAY HOUSE-VOCATIONAL TRAINING PROGRAM FOR DELINQUENT BOYS

Purpose: To demonstrate that nonschool-oriented delinquent boys from MacLaren School can be more effectively integrated back into community living through a combined halfway house-vocational training program in Portland which will provide a less structured environment than the institution.
Methods: Group and individual counseling and involvement of families; intensive vocational training and job placement program through the Youth

Opportunities Center, a division of the Oregon State Employment Service; remedial education for those boys with less than a seventh-grade achievement level; and evaluation of community performance of project boys with boys in two control groups.
Duration: February 1965-January 1966.
Investigator(s): Amos E. Reed, Superintendent, MacLaren School for Boys, Oregon State Board of Control, Route 1, Box 37, Woodburn, Oreg.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-KM-6 HORIZON HOUSE, INC.

Purpose: A demonstration project to help children of normal intelligence who are in conflict with authority and are educationally poor achievers.
Subjects: 15 boys between the ages of 13 and 16, and a matching control group from the local juvenile court.
Methods: Subjects are entered in a four-part program consisting of casework services to the child and parents, planned recreation, instruction in remedial reading, and field trips to cultural attractions, sporting events, and to businesses and industries. Sample and control groups will be carefully evaluated diagnostically on before-and-after basis in an effort to identify effective methods of treating this type of child. Standardized and projective tests, as well as clinical observations, will be used to obtain data.
Duration: September 1964-June 1967.
Investigator(s): Lorenz Villeponteaux, Jr., Director, and Rosa Strait, Horizon House, Inc., 14 Green St., Charleston, S. C. (Reported by NCCD.)
Cooperating group(s): Junior League of Charleston, Inc.; South Carolina Mental Health Commission; South Carolina Vocational Rehabilitation Office.

19-KM-7 EVALUATION OF AN INSTITUTIONAL PROGRAM IN RELATION TO AFTER-CARE OF RELEASED CHILDREN UNDER THE BOMBAY CHILDREN ACT, 1948, AND ITS CORRELATION WITH THE SOCIAL BACKGROUND AND THE BEHAVIOR PATTERN GROUPS AT THE STAGE WHEN THEY WERE REFERRED TO THE JUVENILE COURTS

Purpose: To evaluate institutional program in relation to preparation of inmates for after-care and successful rehabilitation on background of causes for which child was referred to juvenile courts.
Subjects: 200 cases of after-care from the Greater Bombay area and 200 cases from the rural area of Poona District, selected by random sampling from references made to juvenile courts.
Methods: Various official records and documents on each subject will be examined in order to get a present picture of personality of the child after his term of treatment in institutional training program. Case-study method of personal interviews of each child will also be used.
Duration: 1964-1966.
Investigator(s): S. D. Gokhale, Assistant Director, Department of Social Welfare of Maharashtra State, 3 Church Rd., Poona 1, India. (Reported by NCCD.)
Cooperating group(s): Maharashtra State Probation and After-Care Association; Department of Social Welfare of Maharashtra State.

19-KM-8 TRAVERSE YOUTH CENTER -- GENESEE COUNTY, MICHIGAN JUVENILE COURT DEMONSTRATION PROJECT: A MULTI-ENTRY TREATMENT APPROACH WITH INDIVIDUAL, PEER GROUP, AND FAMILY

Purpose: To define and delineate treatment process in action, its operation and impact; to evaluate the total impact on delinquents as compared to matched controls for whom no special treatment program is available; and to develop predictive measures for continued recidivism among repeated offenders.

Subjects: Repeated juvenile offenders, ages 14 to 17, and matched controls.

Methods: Subjects will receive community-based treatment and training. Observations, ratings of behavioral and attitudinal change, individual perceptional measures and performance measures will be obtained for each phase of treatment for delinquents, parents, and three-family units. Three dependent variables will be the foci for analysis: the delinquent behavioral output within the treatment program; the delinquent behavioral output outside the treatment program; and attitudinal and perceptional movement within the individual. Where appropriate, similar data will be collected for matched control delinquents.

Duration: September 1962-August 1965.

Investigator(s): Ross M. Peterson, Director; and George D. Stevens, Traverse Youth Center, 434 W. 4th Ave., Flint; Jean W. Butman, Ph.D., and Ronald Lippitt, Ph.D., Professor of Sociology and Psychology, Institute for Social Research, University of Michigan, Ann Arbor, Mich. (Reported by NCCD.)

Cooperating group(s): Flint Youth Study, Institute for Social Research; Flint Mental Health Clinic; Flint Park and Recreation Department; Genesee County Probate Court; Genesee County Board of Supervisors; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-KM-9 "THERAPEUTIC OPEN INSTITUTIONAL TREATMENT" AS A METHOD OF THERAPY AND AN EVALUATION OF ITS EFFECT IN A JUVENILE DETENTION AND CLASSIFICATION HOME

Purpose: To relieve the anxiety and mental tension of juvenile delinquents detained in an institution pending judgment, and to enable them to gain insight into their own problems by what is called "therapeutic open institutional treatment."

Subjects: 100 boys detained in an institution.

Methods: Treatment involves establishing a definite rhythm for subject's time in detention, releasing them from their cells during the day and enabling them to have a quiet time during the night for introspection. Subjects are given mental and physical recreation, and visual and auditory education in order to stimulate their self-insight. They engage in painting, clay work, plastering, dairy farming, writing, and music appreciation in addition to gymnastics, baseball, tennis, volley ball, and ping pong, and receive individual counseling and guidance. To evaluate treatment, various questionnaires and psychological tests are given to subjects.

Findings: Anxiety and mental tension of subjects were found to be appreciably alleviated within 14 days after admission. The boys, in the majority, approved of the treatment and participated in it. Results from a modified Taylor anxiety test showed that stability of emotion, behavior, and human relations in detention life were recovered after 20 days. Results from the TAT showed no statistically significant differences. However, some decrease in rejection and improvement in passive attitudes can be considered the result of this treatment.

Duration: April 1961-1964.

Investigator(s): Teruo Abe, 5-40, Suketo-Honcho, Tokushima-shi, Tokushima, Japan. (Reported by NCCD.)

Cooperating group(s): Tokushima Juvenile Detention and Classification Home.

Publication: Shikoku Kyosei Kagaku, No. 16, 1962 (Shikoku Correctional Science, a periodical issued from Takamatsu Correction District Headquarters.)

19-KM-10 STUDY OF THE EFFECT OF MUSIC ON GROUPS IN CORRECTIONAL INSTITUTIONS

Purpose: To test effect of the use of music therapy on juvenile delinquents held in a detention and classification home.
Findings: Delinquents seem to have poor musical ability and their appreciation of music is below that of control groups two or three years younger. In particular, they lack rhythm, melody, and harmony. Their favorite music has a quick rhythm. Slow music seems to wake too many recollections. Soft music, Japanese children's songs, and folk songs were found to have a softening effect on them and were effective in preparing them for sleep. Using music as a signal for waking up was also effective.
Duration: April 1962-March 1964.
Investigator(s): Ryota Kobayashi, 484 Nishitachibana-cho, Matsuyama, Ehime Prefecture, Japan. (Reported by NCCD.)
Cooperating group(s): Matsuyama Juvenile Detention and Classification Home.

19-KM-11 DEVELOPMENT OF BASE EXPECTANCIES FOR OFFENDERS RELEASED FROM WISCONSIN JUVENILE CORRECTIONAL INSTITUTIONS

Purpose: To evaluate treatment results taking into account the differential risk groups involved in treatment of various types; to identify these risk groups.
Subjects: All boys and girls first released from Wisconsin juvenile correctional institutions during the calendar years 1959 and 1960.
Methods: Each released offender will be followed up on aftercare for one year.
Duration: March 1963-continuing.
Investigator(s): John W. Mannering (deceased); Dean V. Babst, Social Research Analyst; and Maurice E. Hubble, Bureau of Research, Division of Corrections, Wisconsin State Department of Public Welfare, 1 W. Wilson St., Madison, Wis. 53702. (Reported by NCCD.)

19-KP-1 THE NATURE OF THERAPEUTIC CHANGE IN ADOLESCENT DELINQUENT BOYS

Purpose: To evaluate and analyze nature of therapeutic change resulting from a successfully completed psychotherapeutic program for adolescent delinquent boys which combined vocational counseling, educational assistance, and psychotherapy; to relate the various aspects of ego functioning in an effort to determine areas of psychotherapeutic change; and to derive reliable and valid scales for measurement of change in personality functioning.
Subjects: 20 adolescent delinquent boys who had just been suspended or had withdrawn from school.
Methods: Results from I.Q. tests, four achievement tests, and a series of thematic stories were obtained from subjects. 10 of the subjects received a new program of treatment, which lasted for 10 months. Thematic stories were obtained in three general areas: self-image, attitude toward authority, and control of aggression. Various scales were devised for analysis of time perspective, guilt, object relationships, and quality of response.

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Investigator(s): Milton F. Shore, Ph.D., Clinical Psychologist, Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md.; and Joseph L. Massimo, Ed.D., Administrative Manager and Head, Vocational Guidance Department, Judge Baker Guidance Center, Boston, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-KP-2 A SHORT-TERM GROUP REHABILITATION PROGRAM FOR DELINQUENT AND PREDELINQUENT ADOLESCENTS

Purpose: To establish a specialized short-term, educationally based, group rehabilitation program for delinquent and predelinquent boys who are potential dropouts. Aims include the reorientation of attitudes and conduct in acceptable social directions; motivation to continue school; provision of assistance in gaining educational skills and attitudes necessary for successful completion of academic and/or vocational programs; and the encouragement of integration of community services with university and educational programs in accomplishing these aims.
Subjects: 14- and 15-year old boys referred by the juvenile court and schools on the basis of behavioral and scholastic problems.
Methods: Remedial instruction from Newark State College; guided group interaction therapy through Essexfields Group Rehabilitation Center; and supportive, guidance, and therapeutic services for boys and their parents from the Family Service Bureau.
Duration: February 1965-February 1966.
Investigator(s): Dr. Saul Pilnick, Welfare Federation of Newark, 45 Branford Pl., Newark, N. J. 07102.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-KP-3 REHABILITATION PROGRAM FOR HARD-CORE, ADOLESCENT OFFENDERS

Purpose: An experimental attempt in a junior high school to deal with hard-core 13.5- to 15.5-year old male offenders in Louisville by attempting to establish a conventional culture with norms and values that will lead the boys to conventional behavior, school adjustment, and nondelinquent goals.
Methods: Guided group interaction, half-day revised educational plan with remedial assistance, half-day work, aggressive intensive family casework, and weekly parental group counseling.
Duration: February 1965-February 1966.
Investigator(s): John M. Wall, Kentucky Child Welfare Research Foundation, Inc., Capitol Annex, Frankfort, Ky.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-KP-4 IDENTIFICATION CHOICE OF DELINQUENT ADOLESCENTS IN CHANGING CULTURES

Purpose: To develop a program of action which would be calculated to supply positive identification choices in a group of early adolescents. Previous studies have seemed to indicate that the identification choice of adolescents

is a powerful factor in the production of delinquency.
Methods: Thorough investigation of this phenomenon in Roxbury, Massachusetts, Honolulu, and perhaps one or more other appropriate settings.
Duration: 1963-continuing.
Investigator(s): Shepard C. Ginandes, M.D.; and Donald Hayes Russell, M.D., 4909 Kalanianaole Highway, Honolulu, Hawaii. (Reported by NCCD.)

19-KP-5 AN EVALUATION OF THE EFFECT OF GROUP COUNSELING IN CORRECTIONAL INSTITUTIONS

Purpose: To study effect of group counseling on girls at the Aiko Training and Reformatory School.
Subjects: Nine girls, aged 15 to 16, with I.Q.'s of 71 to 118, who had been in the institution two to 10 months, were given group counseling.
Methods: Counseling sessions were given one hour per week for 20 weeks. Spoken record of counseling sessions was analyzed and relation between various occurrences in each session and improvement of behavior in the institutions was noted.
Findings: As sessions progressed, self-insight progressed and the girls' feelings changed from negative to positive because of relief and dissolution of tension and recognition by the girls of their own emotions during the sessions. Other significant changes and improvements were noted and applied to other treatment measures.
Duration: April 1960-December 1964.
Investigator(s): Yoshie Miyamoto, 21138 Nakamachi, Nerima-ku, Tokyo, Japan. (Reported by NCCD.)
Cooperating group(s): Tokyo Juvenile Detention and Classification Home.

THE CHILD IN THE FAMILY

Family relations

19-LA-1 FAMILY PATTERN AND PERSONALITY DEVELOPMENT

Purpose: To study relationship between recalled patterns of family interaction and disciplinary experiences and scores on questionnaire tests of personality.
Subjects: 250 college students.
Methods: Questionnaires; correlational and factor analysis, analysis of variance.
Findings: Recalled consistency of discipline is positively related to low scores on an anxiety measure.
Duration: 1956-not reported.
Investigator(s): Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill.

19-LA-2 FAMILY INTERACTION, COALITION, DISAGREEMENT, AND COMPROMISE IN PROBLEM, NORMAL, AND SYNTHETIC FAMILY TRIADS

Purpose: To compare above-indicated triads in a competitive game and a family-relevant questionnaire situation.
Subjects: 12 triads of each kind ("problem"...father, mother, and delinquent son; "normal"...father, mother, and nondelinquent son; and "synthetic"...father, mother, and son from different families.)
Methods: Each triad played a series of games under three different "power patterns"; similarly, each triad answered a series of questions, first by indicating positions independently by members, then by discussion, resolving differences.
Findings: No consistent pattern of differences in strategy or outcomes on the game, although significant differences on a number of variables. On the questionnaire, synthetic families disagreed most initially and compromised most. Other findings showed differences between problem and normal families, as well as between each of these and synthetic families.
Duration: Fall 1964-not reported.
Investigator(s): Arthur M. Bodin, Ph.D., Research Psychologist, Mental Research Institute, Palo Alto Medical Research Foundation, 860 Bryant St., Palo Alto, Calif. (Reported by W. Edgar Vinacke, Ph.D., Department of Psychology, State University of New York at Buffalo, Buffalo, N. Y. 14214.)
Cooperating group(s): State University of New York at Buffalo; Office of Naval Research, U. S. Department of Defense.
Publication: Journal publication planned.

19-LA-3 STUDY ON POSTPARTUM SEPARATION AND DISTURBANCES IN MOTHER-CHILD RELATIONSHIP

Purpose: To obtain information concerning the psychodynamics of the postpartum period, and the breakdown of the mother-child relationship in the early postpartum weeks.

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Subjects: Systematic sample of mothers and babies delivered at Baltimore city hospitals in 1960 and 1961.
Methods: Statistical evaluation of information from birth certificates, charts, prenatal record, social services and house visit information and interviews.
Findings: Every fifth mother goes home leaving a live baby behind for hospital care or for adoption. Length of necessary separation depends on status of child. In a large percentage an additional unnecessary delay occurs in re-establishing mother-child relationship. Causes for such delay and associated sociological data are under investigation.
Duration: 1961-1965.
Investigator(s): Frederick M. Zerzavy, M.D., M.P.H., Lecturer, Department of Maternal and Child Health, Johns Hopkins University School of Hygiene and Public Health, Baltimore 5, Md.
Cooperating group(s): Baltimore City Hospital; Department of Vital Statistics, Baltimore City Welfare Department.
Publication: Study will be submitted as thesis in 1965; a second paper on the sociology of prematurity is planned for submission as a monograph to the Johns Hopkins University Press.

19-LA-4 FAMILY DIAGNOSES AND FUNCTIONS

Purpose: To identify characteristics of families which are associated with poor school adjustments of children, and with social deviance of children.
Subjects: Families of elementary school-age children.
Methods: Based on a search of the literature, interview procedures and related rating procedures have been developed for family interviews. Observers make ratings independently.
Duration: September 1964-August 1967.
Investigator(s): Lucy C. Rau, Ph.D., and C. Leland Winder, Ph.D., Professor and Chairman, Department of Psychology, Michigan State University, East Lansing, Mich. 48823.
Publication: Publication will be in a standard psychological journal provided results seem to be a contribution to knowledge.

19-LA-5 RELATIONS BETWEEN PARENTAL ATTITUDES, PERSONALITY CHARACTERISTICS, AND MARITAL ADJUSTMENT AND AGGRESSION IN PRESCHOOL CHILDREN

Purpose: To explore relations between specified parental variables and children's aggression; to evaluate a time-sample observation method as a means of studying young children; and to investigate sex differences in aggressive behavior of young children.
Subjects: 36 laboratory preschool children and their parents.
Methods: For the children, two-minute time sample observations in the preschool setting; for the parents, group administration of the Parent Practices Research Scale, Locke Marital Adjustment Scale, and Terman Self-Rating Happiness Scale.
Duration: March 1963-December 1964.
Investigator(s): E. Duwayne Keller, Ph.D., Assistant Professor, and Eleanore Braun Luckey, Ph.D., Professor and Head, Department of Child Development and Family Relations, University of Connecticut, Storrs, Conn.
Cooperating group(s): University of Connecticut Research Foundation.
Publication: Publication in a professional journal is anticipated.

19-LA-6 LONGITUDINAL STUDIES OF PARENT-CHILD RELATIONSHIPS

Purpose: To follow longitudinally the development of particular behaviors: early sexual behavior, development of attachments to people and objects, body image and sexual role differentiations, breast feeding variations and significance, origins of phantasy in the young child, the child's tie to the father as well as the mother, and origins of creativity.
Subjects: A small number of children in their family settings.
Methods: Utilization of parental observational recorded data supplemented by frequent observations by the author, and periodic infant tests.
Duration: February 1962-1970.
Investigator(s): James A. Kleeman, M.D., Psychoanalyst in private practice, and (Assistant Clinical Professor of Psychiatry, Yale University, School of Medicine,) Bethmour Rd., Bethany, Conn.

19-LA-7 ULCERATIVE COLITIS AND FAMILY INTERACTION

Purpose: To study the interaction of a small sample of families in which a child has ulcerative colitis, and to determine if families appear to have anything in common which would be part of the etiology of ulcerative colitis.
Subjects: Eight white, upper middle class families with children between ages of 8 and 16 in which one of the children has had acute and chronic ulcerative colitis diagnosed by X-ray and laboratory findings.
Methods: The families were seen in 5 to 12 interviews, including a structured interview and the Haley-Ferreira Interactional Measurement. In addition to analyzing interaction in the structured interview, the response of the family to a therapy-type setting, and the findings of a detailed historical method questionnaire were noted.
Findings: The eight families, although a small sample, were suprisingly uniform in the more obvious patterns of interaction and in much of their social data. They all showed marked restrictiveness and an amazing amount of social isolation, considering their ethnic groups, income, etc.
Duration: January 1964-December 1967.
Investigator(s): Don D. Jackson, M.D., Director, Mental Research Institute, Palo Alto Medical Research Foundation, 860 Bryant St., Palo Alto; and Irvin D. Yalom, M.D., Assistant Professor of Psychiatry, Stanford University, Stanford, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A paper is in preparation to be published in *Psychosomatic Medicine*.

19-LA-8 HEALTH ORIENTATIONS OF PARENTS AND CHILDREN

Purpose: To investigate health orientations of family members; to characterize, in a systematic fashion, patterns of variation in family members' attitudes, values, beliefs, perceptions, and behavior concerning phenomena of illness and health; and to examine ways in which selected personal and situational factors relate to health orientations.
Subjects: 200 hospitalized children and their mothers.
Methods: Information on subjects was obtained by use of focused interviews, questionnaires, and rating scales, along with ratings made by nurses who have observed the child in the hospital setting.
Duration: Not reported-1967.
Investigator(s): John D. Campbell, Ph.D., and Margaret D. Vogel, Social

Science Analysts, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-LA-9 PATTERNS OF FAMILY INTERACTION: THE FAMILY RORSCHACH STUDY OF NORMAL FAMILIES

Purpose: To standardize a new technique for identifying and describing patterns of family interaction, the Family Rorschach; to compare family interaction patterns in normal and different types of abnormal families; and to test the hypothesis that the nature of specific psychiatric disorders seen in adolescents is significantly related to the nature of the family interaction.

Subjects: 10 normal control families individually matched for age, sex, education, and socio-economic status with 10 each of families having offspring with two different kinds of schizophrenic and two different kinds of neurotic symptomology.

Methods: Family Rorschach is administered to subjects, preceded by an individually-administered battery of psychological tests and followed by a structured interview.

Investigator(s): Nathene Loveland, Ph.D., Chief Psychologist, Family Studies Section, Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-LA-10 AN INVESTIGATION OF THE CHILD'S PERCEPTION OF PARENT BEHAVIOR

Methods: An inventory consisting of 26 scales was developed to collect data on the child's perception of parent behavior. Reports of parent behavior and self-reports of adjustment were collected.

Findings: Highly significant differences were found between descriptions of mothers and fathers and between groups of subjects. A factor analysis revealed a major factor of Acceptance vs. Rejection that included more than half of the common factor variance and two control factors: Psychological Autonomy vs. Psychological Control and Firm Control vs. Lax Control. Significant correlations were found between several maladjustment scales and reports of hostile detachment of fathers and hostile involvement of mothers. Psychological control scales--Intrusiveness, Control through Guilt and Possessiveness, also show significant correlations with adjustment.

Duration: Not reported-1965.

Investigator(s): Earl S. Schaefer, Ph.D., Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-LA-11 INVESTIGATION OF A VARIETY OF PROBLEMS AMONG CHILDREN IN LARGE FAMILIES

Purpose: To study the conditions in the homes of large families today.

Subjects: 700 to 800 large families throughout the United States.

Methods: Questionnaires.

Duration: September 1963-September 1967.

Investigator(s): Sister Mary Amatora, O.S.F., Ph.D., Chairman, Department of Psychology, St. Francis College, 2705 Spring St., Fort Wayne, Ind. 46808.

Publication: Publication planned in psychological journals.

19-LA-12 METHODOLOGY OF FAMILY INTERACTION

Purpose: To devise appropriate methodology to compare child personality and family interaction.

Subjects: Ninth grade pupils selected at random.

Methods: Scales; structured interviews with parents; home visits; and Leary Interpersonal Checklist (modified by Terrill).

Findings: Good rater agreement on scales and on Interpersonal Checklist.

Duration: September 1964-December 1965.

Investigator(s): Don D. Jackson, M.D., Director; Jules Riskin, M.D., Associate Director; James Terrill, Ph.D.; Janes Beavin, B.A.; and Carlos Sluzki, M.D., Research Associates, Mental Research Institute, Palo Alto Medical Research Foundation, 860 Bryant St., Palo Alto, Calif.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: To be published in *Family Process* and *Archives of General Psychiatry*.

19-LA-13 PARENTS' FEELING OF ADEQUACY RELATED TO THEIR CHILDREN'S MENTAL HEALTH

Purpose: To investigate relationships between various measures of home and parent variables and various child measures.

Subjects: 100 children and parents in current longitudinal study at the Institute.

Methods: Parents are given a Q-sort (self-ideal) test of parent attitudes, constructed by staff at the Institute, and the Grapko adult security test. An estimate of the home environment is being devised. Children are given a battery of tests which include Institute security tests at several age levels, the Northway sociometric tests, measures of intelligence, creativity, and conceptual and perceptual motor development.

Findings: Findings based on results from 37 fathers and 39 mothers suggest that there is a slight tendency for the mothers to feel more adequate as parents than fathers, but that fathers may have higher mental health quotients than mothers. These findings await the addition of further cases to be confirmed.

Duration: 1962-1973.

Investigator(s): Nan Foster, M.A., Lecturer, Institute of Child Study, University of Toronto, Toronto, Ont.

Cooperating group(s): Ontario Mental Health Foundation.

Publication: *Mental Hygiene* 43:3, July 1959. *Bulletin of the Institute of Child Study*, Nos. 102-103, Winter 1964-65. Progress of the study to be reported in the Bulletin and in other Institute publications.

19-LA-14 AN INTERVIEW STUDY OF PARENTS OF ANXIOUS AND DEFENSIVE BOYS

Purpose: To follow up previously reported research on defensive behavior of parents during an interview situation, as related to their son's score on the Test Anxiety Scale for Children; to further delineate such defensive behavior in terms of its relative manifestations in mothers versus fathers, and its relationship to children's scores on the Defensiveness Scale for Children; and to investigate the life experiences of test anxious and defensive boys, their parents' evaluations of them, and some characteristics of the parent-child relationship.

Methods: Independent, standardized interviews were conducted with mothers and fathers of third grade boys.

Findings: This study raised methodological questions concerning the

usefulness of parental reports as data on child-rearing practices and attitudes. It led to revisions in the conceptions of the parent-child relationship of test anxious versus defensive boys that are to be pursued in further work.
Investigator(s): Sheila C. Feld, Ph.D., Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md.; Seymour B. Sarason, Ph.D., Professor of Psychology, Yale University, New Haven; and Wayne A. Owen, Ph.D., Staff Psychologist, Institute of Living, 200 Retreat Ave., Hartford, Conn.

19-LD-1 EFFECT OF INCARCERATION ON THE FAMILY

Purpose: To determine the effect upon the structure and function of the family when the husband and father goes to prison; to discover who assumes this new responsibility; to determine how the families support themselves during the absence of the working member; and to determine the most stressful and traumatic periods that the process of incarceration brings to the family.
Subjects: 91 married, male parolees, who had served at least one year in prison and were still under parole supervision in the State of Florida on May 1, 1963.
Methods: Questionnaires were prepared and pretested for use in field interview situations. From May through August 1963, the principal investigator and four graduate students traveled throughout Florida interviewing parolees, their supervising parole officers, and their wives and children. Relatives, employers, teachers, and cooperating community agencies were also interviewed. More than a thousand separate interviews were done to complete the study.
Findings: The wives and children, together with parents, brothers, and sisters of both the husband and the wife, rose to the occasion and carried the added burdens, both emotional and financial, that incarceration of the husband-father brought. While the effects of incarceration were disturbing to both the prisoner and his family, a surprisingly large percentage came through unscathed and, in many cases, a traumatic experience became a strengthening experience.
Investigator(s): George G. Killinger, Ph.D., Professor of Criminology and Corrections, Florida State University, Tallahassee, Fla.
Cooperating group(s): Florida Council on Research and Training in Mental Health.
Publication: Probably will be published in Federal Probation.

19-LD-2 COMPOSITION AND STRUCTURE OF THE NEGRO FAMILY

Purpose: To discover why Negro fathers apparently are more likely to remain in the home if they have male children.
Methods: Negro mothers were interviewed at length as they brought their children to the Charity Hospital clinic. Sixty-two Negro women, randomly selected, were interviewed in their own homes. Cases from the Family Service Association (36 Negro and 25 white) were reviewed for differences in family problems in the two racial groups.
Findings: Hypotheses have been formulated from the above data as to possible causes for husbands being more likely to remain in homes where there are sons: (1) demographic hypothesis--the possibility that more females are born into disturbed family situations; (2) father-son identification hypothesis--tendency to form one-sex alliances in Negro families;

(3) fear of femininity hypothesis--presence of too large a proportion of females is threatening to male identity; and (4) intermediate object hypothesis--role of father to a son binds the Negro male into the family structure. Without this role, he has no secure place in the family.
Duration: September 1964-indefinite.
Investigator(s): Ann Fischer, Ph.D., Associate Professor, Department of Sociology and Anthropology, Tulane University, New Orleans, La.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Two papers have been delivered but are not yet published.

19-LD-3 FAMILY STRUCTURE AND THE HEALTH OF CHILDREN

Purpose: To provide a broad range of population parameters for the health of children in general; to assess quantitative and qualitative differences between health of adopted and nonadopted children; to provide basic information for social planning and social action in health and welfare fields; to investigate the relationship between social mobility of parents and adequacy of functioning of their children; and to test several theories advanced in the literature in order to obtain leads on the etiology of observed difficulties of functioning.
Subjects: Stratified random sample of families with children between ages 3 and 16.
Methods: Interviewing supplemented by data from records kept in governmental agencies, hospitals, and schools.
Duration: 1963-1967.
Investigator(s): H. David Kirk, Ph.D., Professor of Sociology, University of Waterloo, Waterloo, Ont.; and Kurt Jonassohn, M.A., Associate Professor of Sociology, Sir George Williams University, Montreal, Que.
Cooperating group(s): Foundations' Fund for Research in Psychiatry; Mental Hygiene Institute of Montreal; Department of Public Welfare, Halifax; Dalhousie Medical School, Halifax; University of Exeter, England; Department of National Health and Welfare, Ottawa.
Publication: Results will be published as available, probably in articles and monograph.

19-LD-4 FERTILITY, ATTITUDES RELEVANT TO FERTILITY, AND FAMILY STRUCTURE IN METROPOLITAN NEW ORLEANS

Purpose: To determine the extent of knowledge about, and attitudes toward, fertility and family planning; to assess fertility and sterility; and to study the changing composition of the family over the lifetimes of the respondents and to evaluate the reasons for and significance of these changes.
Subjects: 1,000 ever-married (including common-law) persons, and ever-pregnant women, who have not yet reached their forth-fifth birthday, randomly selected from the New Orleans Standard Metropolitan Statistical Area.
Methods: Subjects will be interviewed. Data obtained, in addition to permitting an investigation of these three topics, will enable investigators to make comparisons of fertility, fertility attitudes, spacing of children, etc., between various types of families in sample, and to document relationships between these fertility factors and family instability.
Duration: 1964-1969.
Investigator(s): Joseph D. Beasley, M.D., Assistant Professor of Child Health, Tulane University School of Medicine, 1430 Tulane Ave., New Orleans,

La. 70112.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-LD-5 RELATIONSHIP OF MATERNAL HEALTH TO FAMILY SOLIDARITY AMONG LOW-INCOME FAMILIES IN 23 APPALACHIAN COUNTIES

Purpose: To determine the impact that long-term or chronic illness has on financially depressed families; to examine family adjustments to maternal illness in light of community resources available to families in the Appalachian counties of Ohio; and to examine the effect that the family's concept of mother's competence to perform her role will have on the mother's desire to regain full productivity.
Investigator(s): Christine H. Hillman, Ph.D., Professor and Head, Division of Family and Child Development, and Ann S. Bardwell, Assistant Project Director, School of Home Economics, Ohio State University, Columbus, Ohio.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-LG-1 MATERNAL EMPLOYMENT AS A POSITIVE REACTION OF THE MODERN URBAN MIDDLE CLASS MARRIED WOMAN TO THE SITUATION OF ANOMIE

Purpose: To determine the relationship of maternal employment to familial patterns in middle class urban families and, more specifically, to examine whether organization of family life in terms of its major tasks is significantly different in families where mothers work from in families where they do not.
Subjects: 40 middle class urban married women, 20 of whom were employed and 20 not employed. In each group 10 mothers had completed only high school education and 10 had completed a college degree or beyond. Every woman had at least two children, none of whom were preschoolers, and all women were living with their husbands in a first marriage.
Methods: Case method; intensive interview in the home of each mother; spot interviews with other members of the family when available.
Findings: The major reason married women work is in order to fulfill the role of economic help-mate to their husbands; those who do not work do not because there is no economic need for their employment. There is no significant difference in the organization of family life where mothers are employed and where they are not. The perception of the meaning of work and the degree of satisfaction with one's life is a function of one's socio-economic class.
Duration: 1960-spring 1964.
Investigator(s): Rosemary Higgins Cass (Ph.D. Candidate, Fordham University), 434 Franklin St., Bloomfield, N. J.
Publication: Possible publication as a study in family life and/or social change. Interested persons may consult author.

19-LJ-1 FAMILY STUDY PROGRAM: POWER DISTRIBUTION PATTERNS IN CLINIC AND NONCLINIC FAMILIES

Purpose: To explore the relationship of family power patterns to the development of emotional disturbance in children, and the differential characteristics of patterns of power distribution in families of pathologically withdrawn and aggressive children.

Subjects: 40 intact middle class families with adolescent children of normal intelligence, equally divided between those having had and those not having had a child with diagnosed emotional disturbance.
Methods: Analysis of data generated by Bales scored family interaction using Strodtbeck's Revealed Differences instrument.
Duration: January 1963-January 1966.
Investigator(s): Solomon Kobrin, M.S., Chief, Division of Social Systems Analysis, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Cooperating group(s): Social Psychology Laboratory, University of Chicago.
Publication: Journal articles planned.

19-LJ-2 BRIEF, INTENSIVE, RESIDENTIAL THERAPY FOR FAMILIES

Purpose: To study a group of families of schizophrenic children who have been in residential treatment at Clear Water Ranch to learn why the children cannot live at home, and how the families function.
Subjects: Families (parents and siblings) and children in residence will be selected according to following criteria: (1) child in residence be verbal and diagnosed schizophrenic or autistic; (2) parents have been participants in the parent therapy groups conducted by Clear Water Ranch Children's House; and (3) parents want the child to return home.
Methods: Families will live at the residential treatment center for a two-week vacation and will participate in family therapy, parent therapy groups, joint meetings with counseling staff and therapists, and the usual work and recreation activities that are part of the Ranch setting. Trained therapists will conduct family therapy, parent therapy, and also act as trained observers. Outside observers will also be utilized. Tests will be used to study family interaction. All therapy sessions will be tape recorded and evaluated.
Duration: September 1964-September 1965.
Investigator(s): Leanore Mesches, M.A., Consulting Psychologist, and Benjamin G. Lewis, Ph.D., Clear Water Ranch Children's House, Inc., 604 College Ave., Santa Rosa, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication is planned in three to four years.

19-LJ-3 FAMILY DIAGNOSIS: MMPI AND CTP RESULTS

Purpose: To assess degree of psychopathology in family members of referred patients.
Subjects: 230 intact families seen at Northland Mental Health Center, Inc.
Methods: Statistical analysis of personality test data.
Findings: The referred patient is basically an emissary from a troubled family. There is a small but significant correlation in the level of pathology between parents of troubled families.
Duration: 1960-1965.
Investigator(s): Richard G. Stennett, Ph.D., Clinical Psychologist, Northland Mental Health Center, Inc., Grand Rapids, Minn.
Publication: Submitted for publication to the *Journal of Clinical Psychology*.

19-LJ-4 THE EMBROILED FAMILY: AN ETIOLOGICAL STUDY OF SCHIZOPHRENIA DEVELOPMENT IN A FAMILY TYPE OF DESCRIBED RELATIONSHIPS AND QUALITIES

Purpose: To describe a variety of family in which schizophrenia frequently occurs; and to formulate etiological hypotheses consistent with this occurrence.
Methods: Analysis of interview and historical record material of families seen as part of the Family Studies Program, correlated with previous diagnostic, history-getting, and therapeutic experience of the investigator.
Findings: In an embroiled family, the child who responds to high parental demands for strength and closeness, without feeling his parents genuinely close or his own strength great enough for the task, may eventually become schizophrenic.
Duration: Not reported-1965.
Investigator(s): Carol F. Hoover, M.S.S.W., Social Service Department, Clinical Research Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-LJ-5 PERCEPTION OF ROLES, CLOSENESS PATTERNS, AND CAPACITIES BY MEMBERS OF FAMILIES IN NORMAL AND OTHER CATEGORIES

Purpose: To evaluate: (1) possible differences in acknowledged roles, closeness, and expectations of one another, in normal families as compared to families containing at least one neurotic or schizophrenic member; (2) any variation between families of these diagnostic categories in the degree of explicit awareness or ability to present clearly the different perceptions; (3) comparative impressions by the investigator of unacknowledged social relationships and mutual expectations within families of these types based on clinical observation and history material; and (4) degree of sibling variation in functioning within families of the different categories.
Methods: Interview with both parents, during which they are asked questions about themselves and all members of immediate family group, regardless of age; a brief interview with each of the two oldest siblings, during which the same questions, where applicable, are asked of them. These interviews are supplemented with history material obtained in the course of the Family Rorschach project, plus observation of the Joint Family Rorschach interviews. Each parent is asked to prepare a Social History Form R, to facilitate possible, more limited comparisons with families on these projects at some future date. In addition, parents are asked to assess the health of each of their children on a separate but similar form. Summary evaluation of each family is prepared after a careful review of transcribed interviews and other material to form the basis for further study.
Duration: Not reported-1967.
Investigator(s): Carol F. Hoover, M.S.S.W., Social Service Department, Clinical Research Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

19-LJ-6 PARENTAL CHILD-REARING ATTITUDES AND CHILDREN'S PERCEPTION OF PARENTAL ROLE

Purpose: To investigate parent-child relationships as seen from the point of view of both the parents and children involved.
Subjects: Children between the ages of 5 and 12 who have been referred to the Children's Clinic of the Institute of Living for psychiatric evaluation.

A group of normal grade school children will also be studied. Efforts will be made to contact both the mothers and fathers of all children seen.
Methods: Parental attitudes toward child rearing will be studied using a modified version of the Torgoff Parental Developmental Timetable. Children's perceptions of their mothers and fathers will be investigated by using several techniques, involving a questionnaire procedure and a picture description technique, developed by Kagan and Lemkin.
Duration: June 1965-June 1967.
Investigator(s): Wayne A. Owen, Ph.D., Staff Psychologist; Marvin Reznikoff, Ph.D., Chief Psychologist; and David Hill, Ph.D., Staff Psychologist, Institute of Living, 200 Retreat Ave., Hartford, Conn. 06102.
Publication: To be submitted to Child Development.

19-LJ-7 CHANGES IN THE COMMUNICATION PROCESS DURING FAMILY THERAPY

Purpose: To clarify relationship between communication break-down and family ill-health and the reinstitution of better communication as a result of family therapy.
Subjects: Consecutive family therapy cases assigned to investigator from the clinic of the Psychology Department at UCLA.
Methods: Intensive analysis of verbal interactions using interaction categories: Informational, Emotional, and Relational. Independent raters achieve moderate reliabilities. Recordings and typescripts are used concurrently.
Findings: Pilot results (one family): Informational and emotional aspects of communication decrease in family therapy; Relational changes depend on particular dyad; no generalization is safe. Each dyad must be considered separately.
Duration: September 1963-unknown.
Investigator(s): Walter J. Raine, Ph.D., Clinical Psychologist, and Assistant Professor in Residence, Neuropsychiatric Institute, University of California at Los Angeles, Los Angeles 24, Calif.
Publication: To be submitted to Family Process.

Child rearing

19-MA-1 MATERNAL CHILD-REARING ATTITUDES RELATED TO NEUROLOGICAL ADEQUACY, EEG NORMALITY, AND INTELLECTUAL FUNCTIONING IN INFANTS

Purpose: To study the relationships between neurological and electroencephalographic functions in children predisposed to develop organic brain dysfunctions as a result of birth conditions and maternal child-rearing attitudes.
Subjects: 20 randomly selected premature infants who survived for one month after birth.
Methods: Mothers were given the Parental Attitude Research Instrument to complete, usually within the first month after child's birth. Neurological, intellectual, developmental, perceptual, and perceptual-motor tasks were administered one week after child's discharge from hospital, at seven months, and at 13 months. Electroencephalograms were taken at 13 months. Interviews were also obtained at each visit.
Findings: The attitude of the mother toward child-rearing practices is the predominant determinant of degree of neurological adequacy and EEG normality, as well as intellectual functioning at 13 months, more than any physical,

developmental, or birth variable.
Duration: January 1964-July 1965.
Investigator(s): Jack Arbit, Ph.D., Assistant Professor; and George K. Yacorzynski, Ph.D., Professor of Psychology, Medical School, Northwestern University, Chicago 11, Ill.
Cooperating group(s): Michael Reese Hospital; Illinois State Department of Mental Health.
Publication: Will publish several reports in appropriate psychological or neurological journals. Also will present report this fall to the Chicago Neurological Society.

19-MD-1 MORAL DEVELOPMENT OF CHILDREN AND ITS RELATION TO PARENTAL ATTITUDES OF INDEPENDENCE GRANTING AND ACHIEVEMENT INDUCEMENT

Purpose: To determine if these two dimensions of parental control have any relation to the conscience orientation of the child.
Subjects: 300 sixth-grade public school children in two school districts of Utah.
Methods: The moral orientation of the child will be measured by means of a battery of instruments adapted from those developed by Dr. Martin Hoffman, which includes projective, open-ended, and objective items, requiring the children to make moral judgments about law violations that are committed under different conditions. The parents will be measured on an adapted form of the Parental-Developmental Time-Table developed by Dr. Irving Torgoff.
Duration: March 1963-August 1965.
Investigator(s): Henry E. Draper (Ph.D. Candidate), Assistant Professor, Department of Human Development and Family Relations, Brigham Young University, Provo, Utah.

19-MD-2 INFANT FEEDING AND WEANING PRACTICE

Purpose: To ascertain: how mothers feed their children in regard to their socio-economic levels; what age the babies are weaned; and what kind of food are supplemented to them.
Subjects: Mothers and their children in Huay Kwang Government Housing Project, Bangkok.
Methods: By interviewing those mothers in the mentioned area.
Duration: November 1964-1965.
Investigator(s): Srisomang Keovichit, M.D., M.P.H., M.S., Lecturer, Faculty of Public Health, University of Medical Sciences, Bangkok, Thailand.
Cooperating group(s): Department of Nutrition and Department of Biostatistics, University of Medical Sciences.

19-MD-3 A STUDY OF CHILD-REARING PRACTICES AMONG CHINESE-AMERICANS AS RELATED TO JUVENILE DELINQUENCY

Purpose: It is hypothesized that the relative absence of delinquency among the young Chinese-Americans is the result of differences in child-rearing pratices and the family structure of the Chinese as compared to other ethnic groups. The purpose of this research is to uncover these differences.
Subjects: Chinese-American mothers with children, or a child, between the ages of 5 and 8, in Chinatown, N. Y.

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Methods: Intensive interviews with the mothers using the Sears, Maccoby, Levin interview schedule.
Duration: June 1965-May 1966.
Investigator(s): Richard T. Sollenberger, Ph.D., Professor of Psychology, Mount Holyoke College, South Hadley, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-MD-4 MEASUREMENT OF DIFFERENCES IN APPROACHES TO REARING OF PRESCHOOL CHILDREN

Purpose: To develop a method by which the child-rearing approach of one parent can be compared with the child-rearing approach of another in terms of: overall pattern of parent-child interaction; deviation from a predefined "optimum" approach; and the "Traditional Family Ideology" Score.
Subjects: 100 volunteer (middle class) mothers of four-year old children.
Methods: Semi-structured interview, and Traditional Family Ideology Questionnaire; Mothers are asked to describe in detail their usual handling of 38 behavioral situations that commonly arise in rearing four-year old children. Rating scales will be constructed for each situation with a predefined "optimum" of parental handling. The mother's overall approach will be determined by the sum total of her deviation from the defined standard of "optimum," by the pattern this deviation takes (Autocratic, Overprotective, etc.), and her score on the "Traditional Family Ideology" Scale.
Duration: June 1965-June 1967.
Investigator(s): Robert W. Chamberlin, Jr., M.D., Assistant Professor of Pediatrics, University of Kentucky Medical Center, Lexington, Ky.
Cooperating group(s): Foundation's Fund for Research in Psychiatry.
Publication: Clinical Pediatrics 4:150-159, 1965.

19-MD-5 CAUSES OF PARENTAL BEHAVIOR

Purpose: To investigate the influences on child-rearing practices as perceived by parents.
Subjects: 39 mothers and 39 fathers in intact families.
Methods: Data collected through interviews with parents; influences coded and analyzed statistically.
Findings: Causes include values, beliefs (both instrumental and descriptive), characteristics and behavior of family members, behavior settings, past experiences, and communication sources. The relation of these to seven demographic variables are reported. Inter-relations examined.
Duration: June 1957-September 1965.
Investigator(s): Lois Meek Stolz, Ph.D., Emeritus Professor of Psychology, Stanford University, Stanford, Calif.
Cooperating group(s): Laboratory of Human Development, Stanford University; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

SOCIAL, ECONOMIC, AND CULTURAL INFLUENCES

19-NA-1 A STUDY OF AMERICAN YOUTH CULTURE

Purpose: To ascertain through the use of ethnographic methods of investigation the characteristics of youth culture in our society.
Subjects: Six male and six female youth groups, 16 to 20 years of age, representative of the major social class, ethnic, racial, and religious categories of the population, as well as of major locations within the local adolescent status system.
Methods: Analysis of the records of participant observation by a staff of field workers trained in methods of enthnographic study, with each worker assigned to a single group for a 9 to 12 month period.
Duration: October 1964-1968.
Investigator(s): Solomon Kobrin, M.A., Chief, Division of Social Systems Analysis, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Publication: Journal articles and monograph are planned.

19-NA-2 AN INVESTIGATION OF TIME PERSPECTIVE AND ITS APPLICABILITY TO CROSS-CULTURAL COMPARISONS

Purpose: To delineate some dimensions of time perspective and develop operational measures of these; to investigate the functional relationships among these variables; and to determine the heuristic value of these variables in cross-cultural and developmental comparisons.
Subjects: Spanish-American, Anglo-American, and American Indian children in three school systems and two age groups (10 and 16).
Methods: A multi-variate analysis of several dimensions of time perspective by race, age, and content, derived from a story-telling task.
Findings: There are many significant and complex relationships among the variables and dimensions studied.
Duration: June 1963-June 1965.
Investigator(s): Alan H. Roberts, Ph.D., Assistant Professor of Psychology, University of Colorado Medical School, Denver, Colo. 80220; and Joel E. Greene, Ph.D., Professor of Psychology, New Mexico Highlands University, Las Vegas, New Mex.
Cooperating group(s): National Science Foundation.
Publication: Final report in preparation, to be followed by publication.

19-NA-3 A COMPARATIVE STUDY OF DREAMS

Subjects: Six Cuna Moon-Child albino boys and brown-skinned controls paired for age and sex.
Methods: Examinations covered skeleton, skin, hair, cutaneous cancer, ears, teeth, eyes, voices, routine laboratory and special tests, heart, intelli-

gence, and psychiatric condition. Their dreams will tell much about differences in attitudes between Moon-Children and their brown controls. Dreams loom large in the Cuna culture, and everybody will tell his dreams, eager for an interpretation. The Moon-Child dreams collected will be compared intra-tribally and with dreams of other primitive cultures. The findings should provide a basis for developing psychotherapeutic measures suited to Moon-Child mental problems.
Findings: Differences were found between albinos and controls for body size, skull shape, nose, ears, hair, skin, shape of eyeball, voice, strength, and metabolism. They were found to suffer from corneal astigmatism and lateral nystagmus. Moon-Children lead an abnormal mental life and are largely rejected by the opposite sex.
Investigator(s): Clyde E. Keeler, Sc.D., Research Associate; Calvin S. Hall, Ph.D., Director; and Robert L. Van de Castle, Ph.D., Associate Director, Institute of Dream Research, Inc., 3525 Crystal View Ct., Miami, Fla. 33133.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-NA-4 LIFE OF THE LOWER CLASSES (TRANSLATED FROM SPANISH)

Purpose: To define and learn about their way of life in Mexico; to show the hazard to children of working, wandering, or begging in the street.
Subjects: Fathers, mothers, and children, including even the youngest.
Duration: February 1964-1966.
Investigator(s): Dr. Hector Solis Quiroga, Chief, Department of Social Integration, National Institute for the Protection of Children, Emiliano Zapata No. 340, Mexico 13, D. F.

19-NA-5 THE DIFFERENTIATION OF VALUES IN RURAL SOCIETY

Purpose: To discover how selected values and attitudes are differentiated for families of varying backgrounds and individuals with different characteristics.
Subjects: A sample of rural youth.
Methods: Subjects will be surveyed by questionnaire technique to ascertain their degree of social conservatism and the correlation of this to various facets of their behavior. These youth will be contrasted primarily with baseline data obtained for a comparable rural youth group in 1947. Adult samples taken from a highly urbanized area, an interstitial rural-urban fringe, and a predominantly agricultural area will also be used to note possible differences in values currently which are associated with place of residence. Values to be scaled are built around social conservatism and its implications.
Investigator(s): R. C. Bealer, Ph.D., Assistant Professor of Rural Sociology, Agricultural Experiment Station, Pennsylvania State University, University Park, Pa.
Cooperating group(s): State of Pennsylvania.

19-NA-6 CHILDREN'S KNOWLEDGE OF OCCUPATIONAL ROLES AND OCCUPATIONAL PRESTIGE RANKINGS

Purpose: To determine relative influence of learning sources, role of personal and social characteristics, family background, residence, and

patterns of television usage on occupational learning.
Subjects: 237 urban and rural children from the school system of a small midwestern city, and their parents.
Methods: Subjects were interviewed concerning their knowledge of selected occupational roles, and their understanding of prestige hierarchies among occupations. Special instruments and techniques were used to assess this knowledge and to maintain interest and attention. The sources from which children acquire their understanding of the world of work were also studied. The occupations used, and the measuring instruments employed, were designed so as to permit comparison of the following learning sources from which a child can gain ideas about occupations: personal contact, television, and general community culture. Information was gathered on parental values, aspirations and expectations from their children, social class level, parental conceptions of occupational prestige systems, family television habits, and many other variables.
Investigator(s): Melvin L. DeFleur, Ph.D., Professor of Sociology, University of Kentucky, Lexington, Ky.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-NA-7 AGE AT MARRIAGE AND RELATED VARIABLES

Purpose: To re-examine independent variables related to age at marriage; to determine importance of age at marriage in educational achievement; to assess relationship of age at marriage to entry into various categories of occupations; to study relationship of age at marriage to marital stability; and to develop a conceptual frame of reference for research in early marriage.
Subjects: A cross-section of rural and urban youth at beginning of ninth grade.
Methods: Comprehensive data would be collected on subjects on three occasions: in ninth grade, as near high school graduation as possible, and approximately four years later near college graduation. Such data would include social, psychological, and educational data believed relevant both to age at marriage and to educational and occupational achievement and marital stability. Such data would constitute "benchmark" data of the study which would allow matching of those marrying early, later, and not at all.
Investigator(s): F. Ivan Nye, Ph.D., Professor of Sociology, Agricultural Experiment Station, Washington State University, Pullman, Wash.
Cooperating group(s): Cooperative State Experiment Station Service, U. S. Department of Agriculture.

19-NA-8 EFFECTS OF STRUCTURAL VARIABLES ON FEMALE BEHAVIOR

Purpose: To analyze individual and interactive effects of community type, socio-economic position, and race on behavior and attitudes of teenage girls.
Subjects: 534 high school girls between ages of 15.5 and 17.5.
Methods: Data collected from questionnaire administered to groups. Statistical tests utilized are Kolmogorov-Smirnov test of cumulative percentage differences and complex analysis of variance with 3-way interaction.
Duration: September 1963-March 1965.
Investigator(s): Jean W. Butman, Ph.D., Study Director, Institute for Social Research, and Henry J. Meyer, Ph.D., Professor of Social Work and Sociology, School of Social Work, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health

Service, U. S. Department of Health, Education, and Welfare.
Publication: Final report in process. Publication uncertain, possible in sociology journal.

19-NA-9 STUDENTS, TEACHERS, AND OPPORTUNITY PERCEPTION IN KENYA

Purpose: To delineate social background of secondary pupils together with their vocational aspirations and expectations; to characterize the teaching force in terms of social background, educational and vocational experience, and viewpoints on educational policy. General aim is to analyze main features of secondary schools in a developing country.
Subjects: Approximately 2000 pupils and 1200 teachers from various types of secondary schools. School system is tripartite, including African, Asian, and European members.
Methods: Pupils and teachers complete schedules giving detailed social and educational data, together with expressions of aspirations, expectations, and viewpoints. Ethnic and area subdivisions of sample are used. Statistical analysis is essentially simple tabulation. Materials are supplemented by voluminous historical and other data on the system.
Duration: May 1964-September 1965.
Investigator(s): C. Arnold Anderson, Ph.D., Professor of Education, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-NA-10 PATTERNS OF ADJUSTMENT AMONG YOUTHS IN CONTEMPORARY SOCIETY: A COMPARATIVE ANALYSIS

Purpose: To provide an understanding of background and orientations of youth and their parents and how these factors affect and are affected by a rapidly changing and urbanizing society; and to provide general knowledge about problems of youth and generic process of youth adjustment in context of a constantly changing urban as well as rural setting.
Subjects: Samples of youths and their parents in Hawaii and the Philippines.
Methods: Rural-urban distinction and stratification indices (socio-economic and ethnic variables) will be utilized as primary classifying variables. Investigation will focus on indicators of behavior orientations of youth, norms and values of youth and their parents, self-perception of youth, parental perception of status-role of youth, and structural functional organization of family.
Investigator(s): Douglas Yamamura, Ph.D., Professor of Sociology, and George Won, Ph.D., Assistant Professor of Sociology, University of Hawaii, Honolulu 14, Hawaii.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-NA-11 CROSS-CULTURAL STUDIES OF PATTERNS OF COGNITIVE ABILITIES IN CHILDREN, AND THE RELATION OF THESE TO FACTORS IN THE CHILDREN'S HOME BACKGROUND AND EDUCATION

Purpose: It is hypothesized that not merely the overall scores (from tests of intellectual factors) but the patterns of mental development along different lines will vary with conditions of upbringing, and that this

research will help to reveal those conditions which chiefly handicap the production of able individuals in underdeveloped territories.
Subjects: Samples of children, ages 11 to 12, in societies where English is the main medium of instruction (though with the aid of local students where the mother-tongue is a Creole, dialect, or other language).
Methods: Subjects will be individually tested, covering briefly a fair range of intellectual factors as well as concept development. Background factors will be assessed mainly by interviewing teachers and children, and will include health and nutritional conditions, standards of living, educational status and aspirations of parents, family patterns and stability, values in child rearing, encouragement of independence, linguistic situation, and length and quality of schooling.
Duration: 1964-1968.
Investigator(s): Philip E. Vernon, Professor of Educational Psychology, Institute of Education, University of London, London; and Dorothy A. F. Vernon, M.A., Remedial Teacher and Educational Psychologist, Hertfordshire County Council, England.
Cooperating group(s): Association for the Aid of Crippled Children.

19-NA-12 SOCIALIZATION AND THE LEBANESE EXTENDED FAMILY

Purpose: A cross-cultural investigation of socialization practices--especially as these relate to learning of sex roles--in a society in which both extended family and peer group are heavily implicated in socialization of the child.
Subjects: 600 people, inhabitants of a small Muslim community situated in central Bekaa valley of Lebanon.
Methods: Standard ethnographic techniques of flexible informant interviews and participant observations will be combined with more structured questionnaires and focused observations of a selected sample of children and their parents.
Duration: December 1963-December 1965.
Investigator(s): John A. Clausen, Ph.D., Director, Institute of Human Development, and Judith R. Williams, Assistant Specialist II, University of California, Berkeley 4, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-NA-13 SOCIAL FUNCTIONS OF THE TURKISH *LISE*

Purpose: To assess role of the *lise*, a secondary school centrally located in the power structure of the society, in the socio-political modernization of Turkey; to determine following characteristics of the students in the *lise*: patterns of recruitment and selection, educational and vocational aspirations and expectations, perceptions of the occupational structure, and values and attitudes concerning themselves as active agents in bringing about change.
Subjects: Approximately 6,000 students drawn from the four types of *lise*: public, private Turkish, foreign-operated, and minority.
Methods: A questionnaire was administered to a sample of subjects. Responses to over 100 items were solicited on socio-economic and educational background of parents; parental occupational and geographical mobility; types of occupations and level of education students wish to have, what they actually expect to get, and reasons for any imbalances between aspirations and expectations; prestige ranking of various occupations and reasons for such ranking; and extent to which students have accepted cultural and

educational modernization.
Investigator(s): Andreas M. Kazamias, School of Education, University of Wisconsin, Madison, Wis.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-ND-1 VOCATIONAL STATUS OF YOUTH NOT GOING TO COLLEGE

Purpose: To determine what aptitudes, skills, and social-personal factors best fit youth for technical and artisan occupations and training needed for these occupations.
Subjects: High school juniors and seniors in a rural area.
Methods: A battery of appropriate tests will be given to subjects. This will be supplemented by environmental data. Correlations and measures of significance of the characteristics of rural youth not planning to go to college will be made to show types of training needed to best fit rural youth for occupations for which tests indicate they are best fitted. Use will be made of tests already given and data available through the Illinois High School Testing Program; these data will be supplemented by visits to schools included in sample. Statistical calculations will be made on IBM equipment.
Duration: July 1963-July 1966.
Investigator(s): D. E. Lindstrom, Ph.D., Professor of Rural Sociology, Department of Agricultural Economics, Agricultural Experiment Station, University of Illinois, Urbana, Ill.
Cooperating group(s): Cooperative State Experiment Station Service, U. S. Department of Agriculture.

19-ND-2 EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS OF HIGH SCHOOL STUDENTS IN NORTH CAROLINA

Purpose: To determine educational and occupational aspirations held; to determine existent differences between educational and occupational aspirations and actual plans; to determine sources of educational and occupational aspirations; to test for relationships between educational and occupational aspirations and certain personal and social variables, such as intelligence, residence, social class, school curriculum, plans for marriage, intention to migrate, and parental attitude; and to compare educational and occupational aspirations of these students with findings reported in similar studies completed elsewhere.
Methods: Data obtained from seniors in 23 high schools located in nonmetropolitan economic areas; and additional information obtained from school records relating to class rank and I.Q. scores. Data are processed through Computing Center and analyzed with appropriate statistical techniques.
Investigator(s): Lawrence W. Drabick, Department of Agricultural Education, North Carolina State of the University of North Carolina at Raleigh, Raleigh, N. C.
Cooperating group(s): State of North Carolina.

19-NG-1 CIVIC ATTITUDES OF JAMAICAN HIGH SCHOOL STUDENTS

Purpose: To inquire into nature of socialization process among pre-adult

Jamaicans to learn how their civic orientations and identifications are developed, and role of selected social institutions such as school and various family structures in this process; to better understand how the civic socialization process contributes to stability of a democratic political system in Jamaica; and to identify some factors within the social system which explain change of civic orientations and identifications among pre-adult Jamaicans.
Subjects: A stratified random sample of approximately 700 Jamaican high school students and a subsample of 300 families of students.
Methods: Survey interview and questionnaire methods will be used to collect data from subjects. Major independent variables are family and family structure, peer group, and school. Some major dependent variables are authoritarian vs. democratic attitudes, feelings of civic inefficacy, political involvement, partisan identifications, developmental rate of civic orientations, and development of orientations toward the civic order. Data will be processed by IBM methods and a statistical analysis of data will be carried out.
Duration: December 1963-June 1965.
Investigator(s): Kenneth P. Langton, M.A., Ford Fellow, Department of Political Science, University of Oregon, Eugene, Oreg.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-NG-2 CHILDREN'S REACTIONS TO PRESIDENT KENNEDY'S ASSASSINATION

Purpose: This analysis of children's political and emotional reactions in times of crisis inquires into attitudes and justice, morality, and American politics. The goal is to contribute to the literature of political socialization.
Subjects: 1400 greater Detroit school children in grades 4, 6, 8, 10, and 12.
Methods: Paper and pencil questionnaire.
Duration: December 1963-December 1965.
Investigator(s): Roberta S. Sigel, Ph.D., Associate Professor of Political Science, Wayne State University; and Irving E. Sigel, Ph.D., Chairman of Research, Merrill-Palmer Institute, Detroit, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Chapter in forthcoming volume by Martha Wolfenstein and Gilbert Kliman, eds., Children and the Death of a President (Doubleday and Company). Chapter in forthcoming volume by Greenberg and Parker, eds., The Kennedy Assassination and the American Public (Stanford University Press).

19-NM-1 CHILDREN'S REACTIONS TO ILLUSTRATIONS PORTRAYING MULTI-ETHNIC GROUPS

Purpose: To note whether or not children notice racial differences among characters in illustrations, and to determine children's reactions to the illustrations.
Subjects: 90 students from different socio-economic areas and three grade levels (kindergarten and grades two and four in an all-white upper-middle class school, an all-Negro lower class school, and an integrated middle class school).
Methods: Interview with each child in which he was presented with stories and illustrations portraying integrated situations. A structured questionnaire was used to ask subjects specific questions about the illustrations and stories.

Duration: May 1965-unknown.
Investigator(s): Samuel Weintraub, Ed.D., Assistant Professor of Education, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Reading Research Center, University of Chicago.
Publication: Will be submitted for publication.

19-NM-2 RELIGIOUS ATTITUDES OF 40 INSTITUTIONALIZED PROTESTANT GIRLS WITH IMPLICATIONS FOR CHRISTIAN EDUCATION: A COMPARATIVE STUDY

Purpose: To determine whether significant differences exist between religious attitudes of a group of institutionalized Protestant girls and those of noninstitutionalized girls, and what implications, if any, these differences have for development of a program of Christian Education for institutionalized girls.
Subjects: 40 girls from Long Lane School, a state school for legal custody of girls who have manifested habitual antisocial behavior; and a control group of girls from local churches, approximately matched with Long Lane girls for socio-economic and educational background.
Methods: Responses to questions of three inventories (An Inventory of Religious Attitudes, Revised Form II, Attitude Inventory and Rosenberg Self-Esteem Questionnaire Study) were analyzed, with aid of IBM processing, using Chi-square test for significance. Results are presented, and suggestions made as to reason for some differences that appear.
Findings: Significant differences in religious attitudes do exist between two groups tested as well as between Negro and white respondents. Attitudes of institutionalized girls appear to be more like those of girls from Negro churches than like those girls from white churches. In development of Christian Education program at Long Lane, the educator will not be able to generalize from his experiences in local church although he may find his experiences with the Negro church to be helpful.
Investigator(s): George H. Sinclair, Jr., Ed.R.D., Pastor, First Baptist Church, 93 Main St., Middletown, Conn.

EDUCATIONAL FACTORS AND SERVICES

General

19-OA-1 ABSENCE FROM SCHOOL: NORMS BY SEX AND GRADE

Purpose: To develop percentile norms for "number of days absent per year" for boys and girls from kindergarten to grade 12.
Subjects: All of the nearly 2000 children enrolled in all of the junior and senior high schools of the four independent school districts of Itasca county.
Methods: All attendance data were transferred to IBM cards for tabulation and analysis.
Findings: Clearly demarcated changes in "number of days absent per year" are observed over the kindergarten - 12 range. These changes are similar in all four districts and appear in the data from both boys and girls. Boys are better attenders than girls. Percentile norms are presented.
Duration: 1964-1965.
Investigator(s): Richard G. Stennett, Ph.D., Northland Social Science Research Program, Grand Rapids, Minn.
Cooperating group(s): Minnesota Association for Mental Health; C. K. Blandin Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted for publication to the Journal of Educational Research.

19-OD-1 EDUCATIONAL ASPIRATIONS OF CANADIAN HIGH SCHOOL GIRLS

Purpose: To evaluate relative influence of high school and community on college plans, and intermediary variables (ability and values).
Subjects: Stratified cluster sample of high schools of Western Canada (Ontario included). All girls in the final year preceding junior matriculation were examined.
Methods: Questionnaire to all subjects; additional data from high school administrations and census material.
Findings: Both high school (in terms of proportion of middle class students) and community (in terms of size) show direct relation to frequency of college planning. When high school is controlled, relation for community size disappeared. When community size is controlled, relation for high school occurs only, but strongly, in large cities. Ability (scores on standardized exams) was an important explanation for effect of high school. Value items showed no explanatory power.
Duration: January 1962-spring 1965.
Investigator(s): Richard P. Boyle, Ph.D., Assistant Professor of Sociology, University of Iowa, Iowa City, Iowa.
Cooperating group(s): Royal Commission on Health Services, Canada.
Publication: Ph.D. dissertation, University of Washington, 1964. Manuscripts for journal publication in preparation.

19-OG-1 A LONGITUDINAL STUDY OF THE EFFECTS OF THE HALF-DAY SESSION IN ELEMENTARY SCHOOLS

Purpose: To examine relationships between number of years a child has attended school on half-day or split-sessions and certain other variables related to successful completion of a school program.
Subjects: Pupils in grades 9, 10, 11, and 12 in a county school system operating on split-session schedules.
Methods: Subjects responded to a questionnaire designed to yield information: (1) regarding successful school experience; (2) of a biographical nature; and (3) concerning aspirations. Information was also available to determine number of years each child had attended school on a half-day schedule.
Duration: May 1964-December 1965.
Investigator(s): Russell P. Kropp, Ed.D., Director, Institute of Human Learning, and Howard W. Stoker, Ph.D., Associate Professor, Educational Research and Testing, Florida State University, Tallahassee, Fla.
Publication: Journal article planned.

19-OG-2 SCHOOL INTEGRATION PROCESSES: DEVELOPMENT EVALUATION

Purpose: To implement and evaluate methods for effective integration of culturally deprived, Negro, elementary and junior high school pupils into presently all-white or nearly all-white public schools.
Methods: Outside facilitators of change will work with principals, teachers, pupils, and neighborhood groups including parents to promote development of positive attitudes and behavior, comfortable interracial interaction, and optimal educational environment in schools. Comparison schools, which will not be offered special services, will be used in evaluation of effectiveness of "change agent" teams. Although a variety of "objective" measures will be used, evaluation program will emphasize techniques of structured and unstructured participant observation and interviewing.
Duration: 1964-1966.
Investigator(s): Irwin Deutscher, Ph.D., Director of Research; Mario D. Fantini; Jerome Beker, Ed.D.; and Gerald Weinstein, Youth Development Center, Syracuse University, Syracuse, N. Y. 13210.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Achievement, aptitude, and school adjustment

19-OM-1 AN EXPLORATORY STUDY OF THE EFFECTS OF BIBLIOTHERAPY ON BEHAVIORAL PATTERNS OF ADOLESCENTS

Purpose: To determine whether there will be a significant difference in changes in behavioral patterns in the areas of personality, problem reduction, achievement, truancy, and disciplinary problems between students who receive bibliotherapy and students who do not.
Subjects: Eight classes of eighth and ninth grade students selected from a large urban area in Kansas have been equated and four have been randomly selected as experimental group and four as control group.
Methods: Teachers of experimental groups will be trained in techniques of bibliotherapy. Both sets of groups will be subjected to diagnostic devices

designed to reveal social and academic problems. Selected readings with possible therapeutic value will be prescribed for students of experimental groups, who, as indicated by diagnostic measures, have social or academic problems. Pre- and post-tests of IPAT, Mooney Problems Checklist, SRA Achievement Series, Haggerty-Olson-Wickman Behavior Rating Schedule, and teacher-devised inventories will be administered to determine change.

Duration: Not reported-August 1965.

Investigator(s): J. T. Sandefur, Ed.D., Chairman, Department of Secondary Education, and Jeanette Bigge, M.A., Associate Professor of Education, Kansas State Teachers College, Emporia, Kans. 66801.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-OM-2 AN INVESTIGATION OF THE RELATIONSHIP BETWEEN SEPARATION BY SEX OF EIGHTH GRADE BOYS AND GIRLS AND ENGLISH ACHIEVEMENT AND SELF-CONCEPT

Purpose: To determine whether boys and girls in sex-segregated classes achieved at higher levels in English and held better views of themselves (self-concepts) than did pupils in mixed classes.

Subjects: 199 subjects were selected from a junior high school seventh grade. These were divided into two all-boy and two all-girl experimental groups and two control groups containing both boys and girls.

Methods: A male English teacher and a female social studies teacher taught experimental all-boys' and all-girls' classes and control class. A female English teacher and a male social studies teacher also taught one each of the experimental groups and a control group. Two basic kinds of comparisons were made. Boys in each of the experimental classes were compared with boys in their respective control classes on measures of English achievement and self-concept. Similarly, girls in experimental and control groups were compared. All classes were given the California Achievement Tests as well as three measures of self-concept, at beginning and end of school year. Teacher classroom logs were utilized to determine teacher attitude toward classes and extent to which instruction was varied according to sex of class taught.

Findings: Findings indicate that there is not conclusive evidence that pupils learn English better in segregated classes or that their self-concepts were enhanced over those of pupils in mixed classes. In fact, it appears that pupils in mixed classes achieved slightly higher in English on an overall basis. Some boys and girls in experimental groups had a significantly better view of themselves as problem solvers as contrasted with their control groups than they did at beginning of experiment.

Duration: Spring 1962-fall 1964.

Investigator(s): Walter B. Waetjen, Ed.D., Professor of Education; Jean D. Grambs, Ed.D.; and John K. Fisher, Staff Associate, Bureau of Educational Research and Field Services, College of Education, University of Maryland, College Park, Md. 20742.

19-OM-3 MONTESSORI PRESCHOOL EDUCATION

Purpose: To find a more effective way of initiating children into their first formal learning experiences; to experiment with various processes and newly designed learning apparatus and materials.

Subjects: Roughly 100 children, ages three to six.

Methods: Application of Montessori Method, i.e., utilization of prepared environment in which learning materials and tasks are designed to capitalize on successive readiness levels of preschool age children. Individualized

approach is stressed with independent self-learning the objective.
Duration: June 1963-December 1965.
Investigator(s): Urban H. Fleege, Ph.D., Associate Vice President, Institutional Planning and Educational Research, DePaul University, Chicago, Ill. 60604.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: 125 copies of the final report will be made available to the U. S. Office of Education Cooperative Research Branch. If findings warrant, project will be described in articles for publication in appropriate journals.

19-OM-4 ACHIEVEMENT MOTIVATION, SELF-ESTEEM, AND GENERALIZATION OF SUCCESS AND FAILURE

Purpose: To find out whether motivational measures can help account for steepness of generalization to similar or dissimilar tasks following success and failure.
Subjects: Second grade boys.
Methods: Repetition choice measure of achievement motivation; embedded figures as a very indirect measure of self-orientation; and Gewirtz (Hava) choice measures of puzzles following success and failure.
Duration: June 1964-August 1965.
Investigator(s): Joseph Veroff, Ph.D., Senior Study Director, Institute for Social Research, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be written as article for Child Development.

19-OM-5 RESPONSE SET, TEST STRUCTURE, AND DEMOGRAPHIC CORRELATES OF TEST ANXIETY AND DEFENSIVENESS IN AN ELEMENTARY SCHOOL POPULATION

Purpose: To provide a pool of subjects with measured levels on Test Anxiety Scale for Children and Defensiveness Scale for Children from which subjects can be selected for further studies which require certain levels of these variables; to investigate methodological questions in assessment of personality by questionnaire-type devices, especially acquiescence response set; to consider homogeneity of Defensiveness Scale for Children with respect to its current content and to consider broadening of its content; and to investigate, in a more diversified sample population than has previously been available, selected demographic and school achievement correlates of TASC and DSC.
Subjects: All students in regular second grade classes in a single metropolitan county public school system, 8,000 to 9,000 students.
Duration: 1965-1966.
Investigator(s): Sheila C. Feld, Ph.D., Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md.

19-OM-6 EDUCATIONAL STATUS OF CHILDREN DURING FIRST SCHOOL YEAR FOLLOWING FOUR YEARS OF LITTLE OR NO SCHOOLING

Purpose: To determine measurable changes in academic aptitude, educational

achievement, occupational and educational aspiration and self-concept on previously educationally-deprived Negro children after a year of resumed formal education.
Subjects: Approximately 1,000 Negro children suffering various amounts of educational deprivation formed population of interest from which subsamples were drawn. Samples consisted of both sexes; ages ranged from 5 to 18 years.
Methods: Group and individual measures of aptitude and achievement as well as self-concept and aspiration questionnaires were administered before and after year of formal schooling.
Findings: While results are still being analyzed, certain overall comments might be made. Year of schooling showed majority of children tested (but far from all) improved on aptitude and achievement measures. However, at no age level did the severely deprived (four years of nonschooling) catch up to moderately deprived (0 to 3.5 years of nonschooling) in terms of mean scores. While educational aspirations rose, occupational aspirations did not. Critical age periods for gains on specific abilities were evident.
Duration: April 1964-March 1966.
Investigator(s): Robert L. Green, Ph.D., Assistant Professor, College of Education, Michigan State University, East Lansing, Mich.; Louis J. Hofmann, Ph.D., Assistant Professor, New York University, New York, N. Y.; and Kenneth Moreland, Ph.D., Professor of Sociology and Anthropology, Randolph-Macon Women's College, Lynchburg, Va.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at the 73rd Annual Convention of the American Psychological Association in Chicago, September 3, 1965.

19-OM-7 VALIDATION OF TESTING PROCEDURES

Purpose: To devise a screening test to pick children at first grade level who will have learning disorders.
Subjects: First grade pupils in East Providence, R. I.
Methods: Test devised by a pediatric-neurologist and a team of therapists and psychologists includes items covering neurological, gross motor, fine motor, eye-hand coordination, language, and psychological variables validated on approximately 650 first graders. Measures are obtained on test-retest and interrater reliability; test is designed for administration by an "untrained" tester.
Findings: Test predicts learning difficulties 92 percent correctly.
Duration: September 1963-November 1965.
Investigator(s): Eric Denhoff, M.D., Medical Director, Meeting Street School, 333 Grotto Ave., Providence 6, R. I. (Reported by Margaret Langdon, Executive Director, Meeting Street School.)
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper to be presented at the International Congress of Pediatrics in Tokyo, November 1965. Publication plans not yet settled.

19-OP-1 IDENTIFICATION CHARACTERISTICS OF CHILDREN IDENTIFIED AS GIFTED, NONGIFTED, CREATIVE, AND NONCREATIVE

Purpose: To try to establish why some gifted children are difficult to identify and why some nongifted children are mistakenly classified as gifted.
Subjects: 161 boys and girls in grades four, five, and six.
Methods: Utilization of nine different tests which measure intelligence,

achievement, creativity, anxiety, personality, and peer-identification.
Duration: October 1962-December 1964.
Investigator(s): Earl Doughty, Jr., Ph.D. Candidate, Department of Elementary Education, Southern Illinois University, Carbondale, Ill.
Publication: Data and results will be available in a doctoral dissertation scheduled for completion by end of calendar year 1964.

19-OP-2 BILINGUAL READINESS IN PRIMARY GRADES

Purpose: To demonstrate how the reality of two different language groups being present within same classroom can be utilized to develop bilingual readiness in both English speaking and non-English speaking children, as well as positive attitudes towards and respect for one's own native culture and language and culture and language of other ethnic groups.
Methods: Bilingual communication will be used in experimental groups of public school kindergarten and first grade classes of predominantly bi-ethnic constellation. All activities for the two separate language groups within one classroom will be carried on simultaneously and will be coordinated into framework of regular programs. Peer interaction will be utilized to the fullest to achieve respective objectives of language readiness and attitudes.
Duration: Not reported-June 1966.
Investigator(s): Mary Finocchiaro, Professor of Education, Hunter College, City University of New York, 695 Park Ave., New York, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-OS-1 STUDIES IN SCHOOL ACHIEVEMENT: I. ACHIEVEMENT AND NONACHIEVEMENT AMONG LOWER CLASS FOURTH GRADE NEGRO CHILDREN--AN INTERDISCIPLINARY STUDY OF PERSONALITY, FAMILY, SOCIAL NETWORK AND ACHIEVEMENT

Purpose: A pilot study to bring both psychiatric and anthropological perspectives to bear on the problem of underachievement amongst lower class Negro children.
Subjects: Four boys and four girls from the same fourth grade class in a public elementary school in a low socio-economic Negro area of Chicago. Achievement levels range from high to low among the group, and family types are of both single- and dual-parent base.
Methods: Psychiatric interviewing of children, psychological testing (WISC, CAT, Rosenzweig P-F Test, and Menninger Sentence Completion Test), and intensive anthropological interviews of the children's parents. Half the parents were also interviewed by a psychiatrist.
Duration: October 1962-not reported.
Investigator(s): Jay G. Hirsch, M.D., Senior Research Associate, and Daniel R. Scheinfeld, M.A., Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-OS-2 CORRELATES OF ACHIEVEMENT AND UNDERACHIEVEMENT IN FOURTH GRADE URBAN NEGRO CHILDREN AND THEIR SCHOOL-AGE SIBLINGS--A STATISTICAL STUDY

Purpose: To explore relationship of family size, household composition, birth order, sex, and age on distribution of school achievement, grades,

I.Q. score, and conduct both within and between families of lower class Negro children in an urban, public elementary school fifth grade.
Subjects: 150 fifth grade students from a disadvantaged Negro area attending the same public elementary school in Chicago, and all of their school-age siblings.
Methods: Family and household composition interviews were carried out on all fifth grade subjects, on whom school cardex cards are also available. School cardex cards are also available for most of the school-age siblings. School achievement scores, grades, group I.Q. scores, and conduct grades will be tabulated against family size, household composition, birth order, and sex.
Duration: May 1964-not reported.
Investigator(s): Daniel R. Scheinfeld, M.A., Research Associate; Jay G. Hirsch, M.D.; and Daniel Solomon, Ph.D., Senior Research Associates, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Publication: Planned for appropriate scientific journals.

19-OS-3 THE EARLY ELEMENTARY SCHOOL RECORD AS A PREDICTOR OF HIGH SCHOOL ACHIEVEMENT IN URBAN LOWER CLASS NEGRO STUDENTS

Purpose: To discover whether achievement or nonachievement at high school level can be predicted on basis of academic performance and conduct in grades one to four.
Subjects: Two samples are involved: (1) two groups of Negro high school students from a single west side high school--34 seniors with high grades (2.0 or better on 4.0 scale) and 39 sophomores with very low grades (less than 1.0 on 4.0 scale); and (2) 60 seniors (30 boys and 30 girls) with high grades (2.0 or better on 4.0 scale), 60 seniors (30 boys and 30 girls) with low grades (1.5 or below on 4.0 scale), and 60 dropouts (30 boys and 30 girls) with grade point average of 1.0 or less prior to dropping out. Students are Negro, from same west side high school. Only those students having early elementary school records in their files were used in the study.
Methods: On both samples the following data have been collected: academic grades in each subject for early elementary school up through present; conduct grades in elementary school; math and reading achievement scores from elementary school; and high school achievement test data.
Findings: Results of discriminate function analysis were as follows: taking four indicators of achievement in grades one through four, grades were found to be the best predictor of high school grades. Sex accounted for largest amount of remaining variance. Conduct accounted for next largest amount of variance. Math and reading scores added little predictive power after these other three variables were accounted for.
Duration: August 1963-August 1965.
Investigator(s): Daniel R. Scheinfeld, M.A., Research Associate; Jay G. Hirsch, M.D.; and Daniel Solomon, Ph.D., Senior Research Associates, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-OS-4 STUDIES IN SCHOOL ACHIEVEMENT, IV: DETERMINANTS OF ACHIEVEMENT AND UNDER-ACHIEVEMENT AMONG LOWER CLASS NEGRO CHILDREN--SOCIAL PSYCHOLOGICAL PERSPECTIVES

Purpose: To discover those characteristics of parental behavior with

particular reference to their children's achievement task performance which help to produce scholastic achievement and achievement behavior in their children.
Subjects: 40 to 50 lower class Negro fifth graders from a single school, all from intact families; mothers and fathers of these children.
Methods: Parental behavior is being assessed in a situation where the child works on a series of problems in presence of parents, who are told that they may give child any help they like. Degree and kind of help is noted; directness versus indirectness of instructions, degree of expressed approval and encouragement; apparent interest in tasks and in child's performance are among other measured variables of parental behavior. Ratings are made at end of each task, at conclusion of session, and from tape recordings of session. These parental behaviors are to be related to children's school records, to achievement test scores, to child's classroom behavior, and to child's achievement behavior in independent testing sessions.
Duration: May 1964-December 1965.
Investigator(s): Daniel Solomon, Ph.D., Senior Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Cooperating group(s): Foundations' Fund for Research in Psychiatry.
Publication: Plan to submit findings to suitable journals.

19-OS-5 DETERMINANTS OF ACHIEVEMENT AND UNDERACHIEVEMENT AMONG LOWER CLASS NEGRO CHILDREN--PSYCHIATRIC PERSPECTIVES

Purpose: To identify and describe certain personality characteristics of achieving and underachieving elementary school lower class Negro children.
Subjects: Fifth grade children from a public elementary school in disadvantaged Negro area in Chicago; eight boys and eight girls, half of whom are achievers and underachievers respectively. Achievement is defined on basis of grade averages, and to a lesser extent by achievement test scores. Measured intelligence (Lorge-Thorndike) is to be similar for both groups.
Methods: A battery of psychological testing and three psychiatric interviews are to be administered to each child in sample. Variables to be explored are: self-reliance, autonomy, impulse control, delay of gratification, constructive aggression, self-esteem, sex-role identity, social identity, achievement standards, attainment value, anxiety, and emotional freedom to learn.
Duration: May 1964-not reported.
Investigator(s): Jay G. Hirsch, M.D., Senior Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)
Cooperating group(s): Foundations' Fund for Research in Psychiatry.
Publication: Data will be published in appropriate professional journals.

19-OS-6 A STUDY OF THE RELATIONSHIP OF BIRTH ORDER TO SCHOOL ACHIEVEMENT

Purpose: To determine whether birth order is related to school achievement, when intelligence is held constant by covariance adjustment.
Subjects: 200 public school students in grades 5, 8, and 11.
Methods: Analysis of variance and covariance using as variables I.Q. achievement, grade point average, sex, race, and birth order.
Duration: July 1961-not reported.
Investigator(s): Noel Jenkin, Ph.D., Director of Research, and Mark

Oberlander, B.A., Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill.

19-OS-7 TRAITS OF SCHOOL ACHIEVERS FROM A DEPRIVED BACKGROUND

Purpose: To identify characteristics of successful school achievers among underprivileged Negro children.
Subjects: 80 "good" achievers (40 boys, 40 girls) and 80 "poor" achievers (40 boys, 40 girls). Good group was achieving at or above grade level, poor group at least 1.5 years below grade as measured by standardized tests. All were Negro, from lower class families in an urban depressed area and free of gross mental, emotional, or physical deficiencies.
Methods: All subjects were given a battery of tests selected to cover a broad spectrum of personality characteristics (WISC, Rorschach, Story Telling, Bender-Gestalt, Uses of Objects, Object Sorting, Semantic Differential, Free Drawings, Drawing Completion, Self-Concept Checklist, Test of Caution, and Achievement Attitudes Test). Also, a pediatrician examined each child and a social worker visited each family at home to interview parents. Intensive case studies of a subsample of 40 children will be undertaken next year.
Duration: September 1964-January 1966.
Investigator(s): Helen H. Davidson, Ph.D., Associate Professor, and Judith W. Greenberg, M.S., Instructor in Education, The City College, City University of New York, Convent Ave. and 138th St., New York, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-OS-8 NONINTELLECTIVE VARIABLES RELATED TO ACADEMIC ACHIEVEMENT OF BRIGHT JUNIOR HIGH SCHOOL BOYS

Purpose: To study various personality variables as related to school achievement.
Subjects: 262 eighth-grade boys from urban areas, WISC I.Q.'s of 116 or higher, carrying normal class load, and of appropriate age for grade. Sample from 18 schools in two cities.
Methods: On basis of seventh and eighth grade grade-point averages and total scores on Iowa Test of Basic Skills, subjects were ranked on composite achievement and divided into high, average, and low groups. All subjects tested with California Psychological Inventory, interviewed, card sort of motives, Bills IAV. High and low groups tested with 10-card TAT, 4-slide projected school TAT (after Des Charmes), and adaptation of Dunn's visual discrimination tachistoscopic test. Factor analysis, regression, and other analyses made.
Duration: July 1964-August 1965.
Investigator(s): Thomas A. Ringness, Ph.D., Professor of Educational Psychology, University of Wisconsin, Madison, Wis.
Cooperating group(s): Madison and Janesville, Wisconsin Public Schools; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Articles will be published as prepared; reprints will be available. Limited number of final reports.

19-OS-9 DETERMINANTS OF ACHIEVEMENT AND UNDERACHIEVEMENT AMONG LOWER CLASS NEGRO CHILDREN--SOCIAL ANTHROPOLOGICAL PERSPECTIVES

Purpose: To study socialization along those dimensions most related to motivation for academic achievement amongst fifth grade lower income Negro children and exploration of relation of differential socialization to a variety of other social and cultural phenomena such as family structure and parents' view of social reality.
Subjects: 24 families (16 duo-parent, and 8 father-absent) from the lower income Negro population on the west side of Chicago. Special attention given to the fifth grader from each of these families and parents or parent surrogates. Families are those of 24 fifth graders from a single school. All fifth graders are within the 89-104 range on the Lorge-Thorndike verbal I.Q. Sample is further controlled for high and low achievement as measured by grades. Hence, 6 girl achievers, 6 boy achievers, 6 girl nonachievers and 6 boy nonachievers along with their families make up sample.
Methods: Six to 10 intensive interviews with each parent and two interviews with each child. Interviews of fathers are conducted by principal investigator and interviews of mothers are conducted by female research assistant.
Duration: May 1964-February 1966.
Investigator(s): Daniel R. Scheinfeld (Ph.D. Candidate), Research Associate, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-OS-10 USE OF A DEVELOPMENTAL INDEX TO PREDICT PUPIL ACHIEVEMENT

Purpose: To determine extent to which growth, physical performance, intellectual, and social-emotional variables, when combined into a developmental index, can be used to identify high and low achievers in language arts, arithmetic, and science in grades four through six.
Subjects: Data on variables collected for some 260 children in fourth, fifth, and sixth grades.
Methods: Factor analysis used to identify developmental factors and loading for each. Profiles of high and low achievers are being compared with those of normal achievers in each grade.
Findings: Indicate that various aspects of development can be identified discretely, that intellectual factor makes major contribution to prediction of school achievement, and that physical performance and emotional development factors are most important nonintellectual factors in predicting achievement. Comparison of developmental profiles for the three years is planned in order to determine relationship between changes in pupil development and achievement.
Investigator(s): Dr. John E. Owens, Director of Instructional Services, Roslyn Public Schools, Roslyn, N. Y.
Cooperating group(s): Office of Research and Evaluation, New York State Education Department.

19-OS-11 MILIEU FACTORS ASSOCIATED WITH ACADEMIC ACHIEVEMENT AND UNDERACHIEVEMENT OF SPANISH-AMERICAN SECONDARY STUDENTS

Purpose: To determine why students of same intellectual abilities are dissimilar in academic achievement.
Subjects: Approximately 100 Spanish-American secondary students, both boys and girls.
Methods: Questionnaire, rating scale data correlated with grade-point

average.
Duration: May-October 1965.
Investigator(s): Lois Jean Gill, Ph.D., Counselor, Denver Public Schools, Denver, Colo.
Publication: *Journal of Educational Psychology*.

19-OS-12 SLOW LEARNERS, COMPETITION, AND PROGRAMMED INSTRUCTION

Purpose: To test hypotheses that: (1) under conditions of group pacing, performance of low ability students will be positively affected when group is relatively homogeneous with respect to ability, and negatively affected when group is heterogeneous, i.e., includes students of high and low ability; and (2) these effects upon performance will be greater when all members of a group are given knowledge of performance of each individual than when knowledge of individual performance is available only to the individual.
Methods: Study will examine effects of two aspects of competition upon performance of low ability student under conditions of group-paced programmed instruction; effect of intensifying the reward system, and of limiting access to rewards. Reward is defined as "psychic" satisfaction that students experience from immediate knowledge of results found in programmed instruction and from knowledge of performance within a group.
Duration: July 1963-August 1964.
Investigator(s): Casper F. Paulson, Jr., Teaching Research Division, Oregon State System of Higher Education, Oregon College of Education, Monmouth, Oreg.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-OS-13 TEST ANXIETY, DEFENSIVENESS, AND NEED FOR ACHIEVEMENT IN YOUNG BOYS: THEIR INTERRELATIONSHIPS, AND RELATIONSHIPS TO PARENTAL ATTITUDES TOWARD INDEPENDENT ACCOMPLISHMENT

Purpose: To investigate interrelationships among aspects of achievement strivings in young boys; and to replicate and extend previous findings on relationship of parental attitudes toward independent accomplishment to need for achievement.
Methods: Projective measurements (story completion) of need for achievement in individual test sessions and group-administered Test Anxiety Scale for Children and Defensiveness Scale for Children were employed. Parental attitudes were assessed by questionnaire.
Duration: 1965-1966.
Investigator(s): Sheila C. Feld, Ph.D., Mental Health Study Center, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, 2340 University Blvd., East, Adelphi, Md. 20783.

19-OV-1 PREDICTION OF SEPARATION PROBLEMS AND OTHER EMOTIONAL PROBLEMS AMONG NURSERY SCHOOL CHILDREN

Purpose: To ascertain whether a questionnaire administered prior to entry in a nursery school may facilitate rapid identification of children who need special preparation for that entry. If such children could be identi-

fied before first day of school, their separation problems could be eased by special technique such as home visits and visit by child to classroom alone with teacher.
Subjects: 15 nursery school children entering a small, private suburban nursery school. Expansion of study to include 200 subjects is contemplated.
Methods: A questionnaire was filled in by parents. Data particularly emphasized were previous separation experiences, traumatic experiences, capacity to form new relationships with children and adults, special assets and weaknesses of the child, and neurotic traits. A psychiatrist rated these questionnaire responses according to a simple scheme. Each child was rated from 0-3 plus, on a scale for predicted separation problems, and from 0-3 plus on a scale for other predicted problems to be manifested in school. These ratings were then compared blindly with similar ratings compiled from teachers' accounts about the children's behavior at the end of one week, two weeks, and nine months in school.
Findings: Although current numbers are too small to warrant serious statistical consideration, it does appear likely that it is possible to predict before school begins which children will have "separation problems" and which will have "other emotional problems." There was particular success in predicting "other emotional problems to be manifested in school," 13 out of 15 predictions being correct to within 1 rank when comparing preschool predictions with the teacher's descriptions at the end of two weeks. Prediction of separation problems was only slightly less successful, 12 out of 15. Results for the nine-month predictions are not yet available.
Duration: September 1964-July 1967.
Investigator(s): Gilbert Kliman, M.D., Director; Doris Gorin, B.A., Education Director; and Elissa Burian, M.A., Educational Consultant, Center for Preventive Psychiatry, 2 Maplemoor Lane, White Plains, N. Y.
Publication: American Journal of Orthopsychiatry, or Journal of Child Psychiatry.

19-OV-2 AN EXPLORATORY STUDY OF STUDENT ATTITUDES IN THE PRIMARY GRADES

Purpose: To explore feasibility of using semistructured sketches of classroom interactions to study primary grade pupils' attitudes toward school and their teachers.
Subjects: 112 first and second grade girls and boys selected from schools in several communities differing in socio-economic characteristics and urban-rural location.
Methods: In individual interviews, subjects were shown a series of 12 specially prepared sketches depicting teacher-child or child-child interaction in classroom. They were asked to tell what had led up to pictured situation or what would happen next. Responses were studied both in terms of overt content and in terms of underlying attitudes that they were believed to reveal. Responses were judged independently by four judges. Chi-square and analysis of variance were used to analyze school, grade, and sex differences. Inter-item correlations were computed.
Findings: Children were highly responsive to interview. Judges showed high agreement in their scoring. Items believed to be tapping aspects of same attitude were positively correlated. Major school, sex, or grade differences were not found.
Duration: October 1964-June 1965.
Investigator(s): Sandra R. Cohen, Ph.D., Associate Research Psychologist, Educational Testing Service, Princeton, N. J. (Reported by John K. Hemphill, Ph.D., Director, Developmental Research Division, Educational Testing Service.)
Cooperating group(s): Commonwealth of Pennsylvania.
Publication: Will seek publication as a monograph; will appear prior to publication as a Research Bulletin of Educational Testing Service.

19-OV-3 TEACHER DECISION MAKING IN AN URBAN CLASSROOM

Purpose: To analyze an important practical educational problem in contemporary society: a middle class teacher's attempts to work with a group of children from an urban slum neighborhood.
Methods: Theoretical framework is a critical synthesis of such social system concepts as external system, internal system, practical equilibrium, norm, interaction, activity and sentiment, and of such decision-making concepts as choice, fact and value propositions, alternatives, consequences and effectiveness. Standard participant observation procedures for an exploratory field study of an ongoing institution have been utilized. Principal investigator has spent a full semester all day-every day in direct observation of a single elementary school classroom in an urban slum area. Research associate is a regularly-employed public school teacher. Field notes of direct observations and informal interviews with pupils and teachers form basic concrete data which are to be analyzed.
Duration: Not reported-October 1965.
Investigator(s): Louis M. Smith, Ph.D., Associate Professor of Education and Psychology, Graduate Institute of Education, Washington University; and George Fairgrieve, St. Louis Schools, St. Louis, Mo.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-OV-4 YOUTHLINGS' MORAL AGE IN SCHOOL

Purpose: To gain some knowledge of 11-, 12-, and 13-year old children's moral and social growth in school as children themselves experience it and work for such growth.
Subjects: 200 sixth grade boys and girls (youthlings), above average in intelligence and socio-economic background, from a suburban public school in Ohio, attended by gentile, Jewish, and Negro children.
Methods: As an outgrowth of a class discussion, the children chose the term "moral age" to describe their age in character and personality development, as compared to their chronological age, mental age, and age measures of other achievements. Moral age indicates degree of maturity they have reached as expressed by their daily behavior in school. Such activities have to do with their relationship to teacher, class, schoolwork, relationship to others, and personal habits. Specific items that make up the children's ideas of moral and social age in school were obtained from the children themselves and developed into charts and tests which the children used as daily guides to measure their personal behavior in school. Their growth in moral age was also measured by items on their report cards and by increasing awareness of their privileges and responsibilities. At the end of the year the children explained how they had grown in moral age in school.
Findings: Children's growth in moral age in school can be stimulated by helping them become aware of their moral age and working to improve in specific ways, such as relationship to teacher and class, school work, obedience, respect, cooperation, being quiet, taking schoolwork seriously, being polite and friendly, having a good personality, carrying responsibilities, and being true to oneself and one's conscience.
Investigator(s): Rose Zeligs, Ed.D., Certified Psychologist in Private Practice, 14256 Ventura Blvd., Sherman Oaks, Calif. 91403.

19-OV-5 SCHOOL ADJUSTMENT AND MALADJUSTMENT OF BOYS OF LOWER SOCIO-ECONOMIC STATUS

Purpose: To find data which may explain why some lower socio-economic boys are successful in school while others do less well or fail, and data on relative success levels of such boys in school as compared with girls of same socio-economic status.
Subjects: Pupils from fifth and sixth grades of one elementary school in New York City metropolitan area, with a total population of about 300 children, half of them boys.
Methods: High, middle, and low achieving boys will be compared for attitudes and values, home conditions, physical characteristics, peer relations, and "masculine" status and attitudes. To distinguish between boy and girl behavior, data sought will be information about relative school adjustment, masculine and feminine characteristics, interest inventories, and interviews to obtain anecdotal material on attitudes toward school, self, and others.
Duration: Not reported-September 1966.
Investigator(s): Patricia Cayo Sexton, Ph.D., Associate Professor of Educational Sociology, New York University, 4 Washington Square, New York 3, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-OY-1 RESULTS OF SYSTEMATIC SUSPENSION: A GUIDANCE TECHNIQUE TO HELP CHILDREN DEVELOP SELF-CONTROL IN PUBLIC SCHOOL CLASSROOMS

Purpose: To evaluate effectiveness of technique of systematic suspension in one school, where it has been in operation for several years, from viewpoints of children, teachers, and parents.
Subjects: 23 children in Magruder School, Torrance Unified School District, who had been on systematic suspension at some time during past three years.
Methods: Questionnaires were devised for children, teachers, and parents who had been active in this technique, with questions designed to assess amount of change observed (in such areas as conduct and work and study habits at home and school), feelings which built up in children and parents during the process, and whether or not technique effectively changed child's behavior.
Findings: Teachers felt that all children showed improvement in behavior, most within a few weeks' time, and school work also began to improve. Children felt that they had all changed their behavior for the better, and none really wanted to go home during the school day. Parents felt that: (1) children would not respond to this technique--they were amazed when they found this to be untrue; and (2) about two-thirds of the children had improved after 10 months. Half the parents had doubts about the technique when first presented, but after a few weeks had definitely made up their minds whether they liked or disliked it. About one-half approved of the technique after six months, and the other half either had some doubts or disapproved of the technique altogether. In general, research confirmed investigator's evaluation of systematic suspension and even increased their enthusiasm for the technique, based on careful selection of children, frequent parent counseling to help change parent attitudes, and consistent, efficient teacher understanding of the process.
Duration: September 1961-September 1964.
Investigator(s): Edwin R. Brown, M.A., Principal, Philip Magruder Elementary School, and Eloise Shields, M.A., School Psychologist, Torrance Unified School District, 4100 W. 185th St., Torrance, Calif.
Publication: Article is being submitted at present to Elementary School Journal.

19-OY-2 AN ATTITUDE SURVEY OF HIGH SCHOOL DROPOUTS BY MEANS OF THE SEMANTIC DIFFERENTIAL PROCESS

Purpose: To identify those attitudes which differentiate between high school dropouts and nondropouts.
Subjects: Total tenth, eleventh grade populations in three southern California high schools; 1,630 tenth grade and 1,465 eleventh grade pupils.
Methods: Meaning of words test was administered to all pupils in October 1963. Dropout group was drawn from the sample as each occurred. Control group was matched on grade level, sex, I.Q. (group), and father's occupation.
Duration: October 1963-June 1965.
Investigator(s): Bruce E. Strem (Ph.D. Candidate, University of Southern California), Consultant in Child Welfare and Attendance, Los Angeles County Superintendent of Schools, 155 W. Washington Blvd., Los Angeles 15, Calif.
Publication: Doctoral dissertation, Department of Educational Psychology, University of Southern California.

19-OY-3 SCHOOL DROPOUT RESEARCH REPORT FOR THE STAMFORD COMMUNITY COUNCIL COMMITTEE ON HIGH SCHOOL DROPOUTS

Purpose: (1) To find out everything possible about lifelong needs, problems, pleasures, attitudes and ideas of the school dropout and potential dropout, and to help him wherever possible; (2) to enlighten professional and lay persons as to the individual dropout or potential dropout and his problems, especially as they might pertain to unmet needs in the particular community.
Subjects: 15 local youths, five of them dropouts, the other 10, potential dropouts.
Methods: Volunteer workers--professional social workers, guidance instructors, school teachers, and interested homemakers with special skills--worked with a research coordinator. Each volunteer worker was assigned to follow one child for a year. After obtaining parent's approval and cooperation, worker would see child each week and attempt to build a relationship which would enable child to confide in worker. It was expected that worker would gain some understanding of family and environmental situation of each child, as well as child's personal problems and his own perception of them. Where need was found, workers were instructed to assist child, or his family, in any possible way. Volunteer workers met regularly as a group with research coordinator to report on individual progress and discuss common problems.
Duration: January 1964-January 1965.
Investigator(s): Leonard Kleinman, Supervisor, and Mrs. Sherman Bletchman, Coordinator, Stamford Community Council Committee, 77 South St., Stamford, Conn. (Reported by Joseph A. Zita, Executive Director, Stamford Community Council Committee.)
Cooperating group(s): The Stamford Foundation.

19-OY-4 HOME VISITING IN PUPIL PERSONNEL WORK

Purpose: To evaluate some dynamics of home visiting as this technique is utilized in pupil personnel work.
Subjects: One set of parents whose child had been referred to the Pupil Personnel Department for placement in a special education situation.
Methods: Investigators engaged in joint home visiting with subjects. A psychological evaluation of the child was done at Mental Health Study Center, and on basis of this evaluation and data supplied by pupil personnel worker and classroom teacher, the child was placed in a residential school

for children with special learning difficulties. While child was in placement, investigators made joint home visits to family, carefully documenting their experiences through process recording. After each home visit, a conference was held with consultant to consider issues which had emerged during previous home visit.
Investigator(s): Richard A. Mackey, M.S.W., Psychiatric Social Worker, and Charlotte S. Spencer, M.Ed., Pupil Personnel Worker, Board of Education, Prince George's County, Upper Marlboro, Md.

19-OY-5 HIGH SCHOOL DROPOUTS

Purpose: To investigate impact of family upon persistence in school.
Subjects: 3,000 white high school students in Greensboro, N. C. high schools, grades 7 to 12 in 1960.
Methods: Questionnaire data in 1960; follow up to see academic progress by 1965.
Duration: 1960-December 1966.
Investigator(s): Dean D. Knudsen, Ph.D., Assistant Professor of Sociology, Ohio State University, Columbus, Ohio 43210.
Publication: Publication planned when all students have graduated or withdrawn from school.

19-OY-6 OCCUPATIONAL CHOICE AND SCHOOL DROPOUT OF PUERTO RICAN YOUTH

Purpose: To study factors influencing decision to drop out of school before completion of twelfth grade; to determine factors influencing decision to enter labor force before entering university work; to determine factors influencing occupational career planning; and to study factors influencing decision to enter or not to enter such selected occupations as teaching, social work, and business.
Subjects: A purposive sample was drawn, in which the following factors were considered: type of school (public-private, secular-religious); economic region (tobacco area, sugarcane area, coffee area, industrial zone); location (city-town, rural areas). A representative group of each school was selected, including students of varied academic indexes (from high to low), to be interviewed. The number of students reporting were as follows: 296 sixth grade, 320 ninth grade, and 195 twelfth grade.
Methods: Two different schedules were administered to students: one for sixth grade students and the other for ninth and twelfth grade students. Both included questions on occupational plans and aspirations, as well as on other factors that were to be considered as independent variables. One year after original interviews, a follow-up of students was conducted in order to know if they continued studying or dropped out of school. Factors associated with dropout are being studied.
Duration: May 1962-1966.
Investigator(s): Agneris Guzman de Duran, B.A., Assistant Sociologist; Jenaro Collazo, M.S., Associate Sociologist; and Ruth M. Silva de Bonilla, M.A., (formerly Research Assistant, Agricultural Experiment Station, Department of Agricultural Economy and Rural Sociology, University of Puerto Rico, Box 516, Rio Piedras, Puerto Rico.
Cooperating group(s): San Antonio elementary, junior, and high schools; Puerto Rico elementary, junior, and high schools; Commonwealth Department of Education.
Publication: Some data already published; other publications planned.

19-OY-7 EMPLOYMENT STATUS AND CHARACTERISTICS OF HIGH SCHOOL DROPOUTS OF HIGH ABILITY

Purpose: Study will involve youth of above average intellectual ability who have withdrawn from Pennsylvania schools during the 1964-65 school year before completing grade 12 and is designed to: (1) determine their employment status; (2) determine their pattern of interests and personality; (3) suggest occupational fields for which training programs should be developed; and (4) provide data from which an instrument may be constructed for identifying students who will benefit from proposed training program.
Subjects: 100 girls and 100 boys drawn from a population of approximately 2000 dropouts having I.Q.'s of 110 or above. There will also be 100 girl and 100 boy persisters selected by matching them with dropout sample.
Methods: The Minnesota Vocational Interest Inventory, the High School Personality Questionnaire, and the Student Information Blank will be administered to dropouts and persisters, and an interview will be conducted to search for real reasons for withdrawal from or continuation in school. Friends of dropouts will be interviewed to gain additional insight into interests and personality of dropouts. Test results of dropouts and persisters will be compared. Information and test scores pertaining to dropout group will be analyzed to determine occupational fields for which training programs should be developed and techniques for identifying potential dropouts.
Duration: April 1965-June 1966.
Investigator(s): Joseph L. French, Ed.D., Professor of Special Education and Educational Psychology, Pennsylvania State University, University Park, Pa. 16802. (Reported by Bartell W. Cardon, Research Assistant, Department of Special Education, Pennsylvania State University.)

19-OY-8 NEW CLASSROOM AND COUNSELING TECHNIQUES FOR DEALING WITH TROUBLESOME YOUTH

Purpose: An experiment in devising new classroom and counseling techniques for youth identified as "trouble makers" in two junior and two senior high school classes. Schools are in areas of marked social pathology, including high rates of delinquency.
Methods: Guided classroom interaction under leadership of a psychologist and an anthropologist; concurrent workshops with faculty members to seek more productive ways of coping with behavioral problems of troublesome youth based on materials gathered in student sessions; meetings with school administrators to focus on changes in school policy to make school environment more conducive to behavioral adjustment of these youth; evaluation of student and teacher change.
Duration: November 1964-November 1965.
Investigator(s): Joseph D. Lohman, M.A., Dean, School of Criminology, University of California, Berkeley, Calif.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-OY-9 COLORADO DROPOUT PROJECT

Purpose: To decrease rate of pupil dropout in Colorado; to evaluate effectiveness of different approaches used by school districts to reduce dropout rates; and to develop a model for local study and action through identification of common elements of most successful action-research programs.
Methods: Within framework of project, local school districts will determine

depth of their study of problem and extent of their action programs. Dropout rates and other relevant statistics and data will be compiled and an evaluation study will be carried out.
Duration: 1963-1968.
Investigator(s): Gerald Ulrich, Consultant, Colorado State Department of Education, State Office Bldg., Denver 2, Colo. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)

19-OY-10 SAN BERNARDINO COUNTY "YOUTH OPPORTUNITY PROJECT"

Purpose: To test theory that "spending money" is a factor in possible school dropouts finishing their high school education.
Subjects: 40 students, primarily boys 15.5 to 17 years of age, selected by Colton Senior High School because they appeared likely to become school dropouts. 20 were randomly chosen to be experimental group, 20 to be control group.
Methods: Subjects will be assigned to an eight-hour day, forty-hour week, beginning June 22, and ending August 31. They will be paid 75 cents an hour, and $30 per week will be credited to each student's account. They will receive $10 per week during the summer and $5 per week during school year as long as they are attending school.
Duration: June 1964-July 1965.
Investigator(s): Stewart C. Smith, Chief Probation Officer; Sam R. Wyland; Roy C. Hill; and Eve McLain, County of San Bernadino, Room 326, Courthouse, San Bernadino, Calif. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)
Cooperating group(s): Board of Supervisors, County of San Bernadino; San Bernadino Office of the State Department of Employment.

19-OY-11 SEPTEMBER EXTENDED DAY COUNSELING PROGRAM FOR SCHOOL DROPOUTS

Purpose: To coordinate back-to-school efforts for dropouts in order to insure full enrollment of students 16 years of age and older who had failed to return to school on the first day; and to provide immediate counselor service to enrolled students of or near to school-leaving age needing encouragement to remain in school.
Subjects: All students enrolled in high school in June, 1963, and those promoted from elementary grades, 16 years of age and older, who had not returned or enrolled on the first day in September; students needing immediate counselor service to encourage retention in school; and spring, 1963 dropouts who had not returned on first day of September.
Methods: Specific mimeographed instructions were outlined including methods for identification of student population to be included in program, methods of contact with students, and procedures to expedite operation of program. Appropriate publicity was given program through release of press reports and cooperation of news media.
Findings: Nearly 9,000 interviews were held and two months later, 40 percent of the returnees were still in school.
Duration: 1963-continuing.
Investigator(s): Benjamin C. Willis, General Superintendent of Schools, Board of Education, 228 North LaSalle St., Chicago 1, Ill. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)
Cooperating group(s): Chicago Board of Education; President's Program to Prevent School Dropouts.

Specific skills

19-PD-1 PERCEPTUAL DEVELOPMENT AS RELATED TO READING PROGRESS IN EARLY SCHOOL YEARS

Purpose: To measure transposition between auditory and visual modalities and between temporal and spatial patterns, and to determine relationship of these measures to general intelligence and reading.
Subjects: Third and fourth grade children in public schools.
Methods: Several procedures have been developed to measure perceptual functions listed above. Group tests of general intelligence and standardized tests of reading comprehension are also administered to every subject. Multiple regression equations are used to determine contribution of each perceptual test, independent of mental age, to statistical prediction of reading ability.
Findings: A test requiring simultaneous transposition from auditory to visual and from temporal to spatial patterns was independently related to reading scores in fourth and in third graders. Another test (Birch and Belmont, 1964) did not contribute, independently of mental age, to the prediction of reading scores.
Duration: January 1965-December 1968.
Investigator(s): Mark Rudnick, Ph.D., Assistant Professor, and Graham M. Sterritt, Ph.D., Associate Professor of Psychology, University of Colorado Medical School, 4200 E. Ninth Ave., Denver, Colo. 80220.
Publication: Publications are being prepared on two completed studies.

19-PD-2 CHILDREN'S CONCEPTS OF THE READING PROCESS: A LONGITUDINAL STUDY

Purpose: To note the concept of reading the first grader brings to school with him, his self-image as a potential reader, and changes in both of these as the child progresses through school.
Subjects: Five classrooms of beginning first graders representing different racial and socio-economic groups.
Methods: Structured interview with each child; use of direct question plus projective techniques; teacher interviews and ratings; standardized tests of reading readiness, reading achievement, and intelligence; school cumulative record data.
Duration: September 1962-June 1964.
Investigator(s): Terry Denny, Ed.D., Assistant Professor, Purdue University, Lafayette, Ind.; and Samuel Weintraub, Ed.D., Assistant Professor of Education, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Purdue Research Foundation; Scott, Foresman Research Fund.
Publication: The Reading Teacher, March 1963; The Elementary School Journal, Fall 1965; final report to be submitted in monograph form.

19-PD-3 COGNITIVE PROCESSES AND READING DISABILITY

Purpose: To ascertain relative importance of impaired functioning of language abilities versus visuospatial abilities as determinants of failure in reading at two stages of development; to investigate role of concept formation as a cognitive trait important for learning to read; and to determine consequences of reading failure on various aspects of cognitive

functioning.
Subjects: 300 first grade and 300 fifth grade children.
Methods: Subjects will be administered reading test, concept formation test, WISC, and a battery of tests which measure language and visuospatial abilities. First grade children will be retested at end of third grade. Comparisons will be made to determine effect of reading failure on concept formation ability and performance on the WISC.
Duration: Not reported-August 1966.
Investigator(s): James C. Reed, Ph.D., Director, Department of Reading and Study Skills, and Associate Professor of Psychology, Wayne State University, Detroit 2, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-PD-4 A STUDY OF THE RELATIONSHIP BETWEEN READING SCORES OBTAINED FROM AUDITORY AND SILENT ADMINISTRATION OF EQUIVALENT FORMS OF THE DIAGNOSTIC READING TESTS TO ESTABLISH A SCALE FOR DETERMINING READING DEFICIENCIES WITH RELATION TO INDIVIDUAL POTENTIAL

Subjects: Public school students.
Methods: Special formula developed by John Carroll of Harvard University.
Duration: 1954-not reported.
Investigator(s): Frances Triggs, Ph.D., Chairman, and Agatha Townsend, Ph.D., Editor, Committee on Diagnostic Reading Tests, Inc., Mountain Home, N. C.; Stanley Davis, Ph.D., Ohio State University, Columbus 10, Ohio; Frederick Westover, Ph.D., University of Alabama, University, Ala.; and John Waldman, Ph.D., Pace College, New York 38, N. Y.
Publication: Findings will be distributed through Committee publications.

19-PD-5 FACTOR ANALYSIS OF SCORES OF DIAGNOSTIC READING TESTS FROM KINDERGARTEN TO NINTH GRADE: RATES OF READING, COMPREHENSION, AND WORD ATTACK

Purpose: To determine to what extent these scores are pure factors.
Subjects: Public school students.
Methods: Verimax solution of factor analysis.
Findings: At upper grade levels, the factors as indicated by the title of the scores are evident.
Duration: 1963-1965.
Investigator(s): Frances Triggs, Ph.D., Chairman, and Agatha Townsend, Ph.D., Editor, Committee on Diagnostic Reading Tests, Inc., Mountain Home, N. C.; Stanley Davis, Ph.D., Ohio State University, Columbus 10, Ohio; Frederick Westover, Ph.D., University of Alabama, University, Ala.; and John Waldman, Ph.D., Pace College, New York 38, N. Y.
Publication: Findings will be distributed through Committee publications.

19-PD-6 AGE-GRADE READING RETARDATION BY ETHNIC GROUPS OF PUBLIC SCHOOL CHILDREN IN THE SAN LUIS VALLEY AND ENVIRONMENTAL/CULTURAL-RELATED CAUSATIONS

Purpose: To study cultural affect among Spanish-American children and Anglo-American children in learning to read; and to establish a basis for reading curriculum adjustments.
Methods: Application of testing instruments in measurement of reading skills and cultural influences in word-symbol association; study of correla-

tions for curricula implications.
Duration: November 1964-June 1965.
Investigator(s): Alfred M. Potts, Ed.D., Professor of Education and Chairman, Center for Cultural Studies, Adams State College, Alamosa, Colo. 81101.

19-PD-7 FOLLOW-UP STUDIES OF POOR AND GOOD READERS

Purpose: To study the subsequent reading progress of two groups of children classed as "poor" and "good" readers at the age of eight, in relation to their personal attributes, home circumstances, school conditions, academic careers, and employment.
Subjects: 98 "good" and 98 "poor" readers to age 14 and, in some cases, beyond.
Methods: Tests administered in schools; assessments, completed questionnaires, and background data contributed by teachers and officers of cooperating authority; direct observation in classroom; interviews with pupils and teachers; and case studies.
Findings: Even in an area where good reading standards are achieved by majority of children, the prognosis for those who have made little headway with reading by the age of eight is very unfavorable. This can be attributed partly to unsatisfactory schooling.
Duration: 1955-December 1964.
Investigator(s): Joyce M. Morris, Ph.D., Research Officer, National Foundation for Educational Research in England and Wales, 79 Wimpole St., London W.1, England.
Cooperating group(s): Kent Education Authority.
Publication: Findings on poor readers are included in report by investigator of a larger investigation (Bulletin 11, Research Relating to Children) to be published under title, Standards and Progress in Reading. Findings on good readers will probably appear as an article.

19-PD-8 REMEDIAL TRAINING OF FIRST GRADE CHILDREN WITH VISUAL PERCEPTUAL RETARDATION

Purpose: To identify and ameliorate visual perceptual immaturity in first grade children; and to investigate the correlation with early reading progress.
Subjects: 155 first grade children, 97 boys, 58 girls.
Methods: Winterhaven Perceptual Forms Test and Harsh-Soeberg Survey of Primary Reading Development were administered as pre- and post-tests. Half of a group identified as low in visual perception scores, were given the Frostig Training Program for 10 weeks; the other half were not. Pearson Product Moment Correlations, both simple and multiple, and t tests were administered to evaluate statistical data.
Findings: No significant correlation between improvement in visual perception and reading achievement. Experimental group made larger overall gains in visual perceptual performance than did untrained group.
Duration: September 1964-1965.
Investigator(s): Ruth I. Cohen (Ed.D. Candidate), Consultant, Division of Research and Guidance, Los Angeles County Superintendent of Schools Office, Los Angeles, Calif. (Reported by May V. Seagoe, Ph.D., Professor and Associate Dean, University of California, Los Angeles.)
Cooperating group(s): Redondo Beach City School District.
Publication: Abstract will be available in late fall 1965.

19-PD-9 A STUDY OF STORIES IN FIRST GRADE READING MATERIALS

Purpose: To determine and evaluate content of commonly used first grade readers, along dimensions of sex, age, characters, theme and outcome; to evaluate influence of content on motivational interest in reading through testing responses of children to stories; and to cross national comparisons of first grade readers.
Subjects: First grade children in public schools.
Methods: Coding stories along dimensions of content analysis; analyzing coded stories (IBM cards) in terms of frequency distributions and cross correlations; using paired choice comparisons of stories with first grade children.
Duration: September 1963-September 1968.
Investigator(s): Gaston E. Blom, M.D., Professor, Department of Psychiatry, and Richard R. Waite, Ph.D., Assistant Professor of Clinical Psychology, Department of Psychiatry, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo. 80220.
Cooperating group(s): Project Literacy; National Institute of Mental Health, Public Health Service, and Office of Education, U. S. Department of Health, Education, and Welfare.

19-PG-1 IMAGE OF LATIN AMERICA: A STUDY OF AMERICAN SCHOOL TEXTBOOKS AND SCHOOL CHILDREN, GRADES TWO THROUGH TWELVE

Purpose: To evaluate progress being made in North American elementary and secondary schools toward understanding of Latin America; to discover extent to which national history and social studies testbooks used in North American elementary and secondary schools help students to know and understand Latin America; and to determine understandings that students actually possess about Latin America.
Subjects: Textbook samples included 80 elementary school and 73 secondary school social studies textbooks. In addition, 1247 students, grades 7 to 12, from 13 different school districts in Michigan, Wisconsin, Ohio, and Texas were tested.
Methods: A content analysis was made of 153 elementary and secondary school social studies textbooks. The following Latin American topics were isolated for intensive analysis: Geography, The People, The Colonial Period and Revolutions, Political Development, United States relations with Latin America, Economic Development, and Social Problems and Social Change. A "Test of Understanding of Latin America" consisting of 68 items was administered to subjects. Comparisons were made between grade levels, metropolitan schools, isolated schools, and Mexican border schools; travel/contact with Latin America and no travel/contact with Latin America; and questions relating closely to textbook content and questions not related to textbook content. Analysis of variance used as a test of significance among various groups.
Findings: North American textbook treatment of Latin American topics have shown positive improvement since last major study in 1944, quantitatively adequate but still in need of qualitative improvement. Elementary textbooks, while avoiding controversy, afford a more extensive coverage of Latin America than secondary textbooks. Students have a reasonable knowledge of Latin America. Mean raw scores ranged from 22.66 (34.9 percent) to 26.98 (41.5 percent) for the various groups. Item analysis would suggest that the textbook is highly significant in determining what students know about Latin America.
Duration: May 1964-October 1965.
Investigator(s): Vito Perrone, Ph.D., Assistant Professor of History, Northern Michigan University, Marquette, Mich.
Cooperating group(s): Office of Education, Department of Health, Education,

and Welfare.
Publication: Full report will be released to all who assisted in the project, including the Office of Education, elementary and secondary school teachers, and many school districts across the U.S. Portions of report will be prepared for publication in several educational journals.

Special education

19-QA-1 A COMMUNITY RESOURCE POOL AND ADOLESCENT IMPRESSIONS OF PROFESSIONAL FIELDS

Purpose: To determine effect of seminar work with professional persons upon adolescents' impressions of various professional fields.
Subjects: Academically talented students in grades 7 through 12.
Methods: Subjects are voluntarily attending Saturday seminars conducted by members of community in such varied specialties as painting, architecture, anthropology, oceanography, medicine, television writing, microbiology, city planning, and social psychology. Comparisons in terms of I.Q., achievement test scores, economic status, and similar demographic characteristics are made between seminar students and those not choosing to participate in seminars. Attitudinal statements are developed to assess pupil views on professions.
Investigator(s): Richard M. Clark, and Reuben R. Rusch, Ph.D., State University of New York, College at Oneonta, Oneonta, N. Y.
Cooperating group(s): Office of Research and Evaluation, New York State Education Department.

19-QB-1 STAFF PROJECT FOR UNDERACHIEVERS

Purpose: To test effectiveness of a combined program of group counseling and intensive remedial reading instruction on academic achievement and personality structure of elementary school children who are scholastically retarded.
Subjects: Six fourth grade boys, six fifth grade boys, one fifth grade girl with average I.Q.'s, showing reading retardation of 18 months or more below grade level.
Methods: Subjects administered WISC, Metropolitan Achievement Test (subtests on spelling and arithmetic only), Roger's Test of Personality Development, Informal Reading Inventory, Botel's Word Opposites Test and Phonic Inventory, and Bond-Clymer Hoyt Developmental Reading Test; developmental history obtained from parents; remedial instruction four sessions per week; group counseling sessions once per week during two consecutive school years; conferences with teachers and parents when deemed appropriate; reading specialist met weekly with each psychologist to coordinate program; retest at conclusion of study.
Duration: September 1963-June 1965.
Investigator(s): Audrey Grupe, Ph.D., and Russel Wray, M.A., School Psychologists; and Doris Kissinger, M.A., Reading Specialist, North Shore Schools, Glen Head, Long Island, N. Y.
Publication: To be submitted for publication.

19-QB-2 **CREATIVE ROLE-PLAYING THERAPY AS AN ADJUNCT TO REMEDIAL READING IN THE MODIFICATION OF READING DISABILITY AND THE PSYCHO-SOCIAL MALADJUSTMENT OF PRE-ADOLESCENT BOYS**

Purpose: To evaluate effects of including treatment of aggression and dependency conflicts of underachievers in reading by means of creative role-playing therapy in a remedial reading program. Effects studied were upon amount of growth in reading achievement, growth with respect to adequacy of coping with aggressive and dependency needs, and change in classroom behavior observed in group remedial reading sessions.
Subjects: 29 boys between ages of 9 and 11, of average or better intelligence, with no uncorrected physiological defects, retarded in reading one year or more, and enrolled in a remedial reading program.
Methods: Two matched groups; control group had 40 sessions of remedial reading; experimental group, 20 sessions of reading, 20 of therapy with nonteaching psychotherapist. Therapy consisted of subjects both discussing and acting in semistructured, fictitious, later biographical dramas involving aggression and dependency expression. Aim was to produce catharsis of these pent-up feelings and training in more adaptive and appropriate expression of these needs so they are not expressed in symptom of reading disability. Tests used were Gates Reading Survey, Human Figure Drawings, Lesser Conflict Analysis of Fantasy, and Haggerty-Olson-Wickman Behavior Rating Scale.
Findings: Experimental group made equal progress in reading achievement despite receiving half the remedial sessions of control group. Role-playing therapy was effective in increasing ability to fantasy aggression and cope with same, reducing strength of dependency needs, and reducing amount of problem behavior in remedial reading sessions. Conclusion is that children who are helped, by whatever means, to increase their ability and freedom to release aggression in fantasy are those who made most progress in remedial reading program.
Duration: February-June 1963.
Investigator(s): Donald L. Wiedis, Ph.D., Supervisor of School Psychologists, Bureau of Child Guidance, New York City Board of Education, 362 Schermerhorn St., Brooklyn, N. Y.
Cooperating group(s): Special Reading Services, New York City Board of Education.
Publication: Doctoral dissertation available from University Microfilms, Ann Arbor, Michigan.

19-QB-3 METHODS FOR HELPING CHILDREN DEVELOP BASIC PSYCHOLOGICAL FUNCTIONS NECESSARY FOR SCHOOL LEARNING IN AREAS OF SENSORY-MOTOR FUNCTIONS, PERCEPTUAL ABILITIES, LANGUAGE SKILLS, AND CERTAIN HIGHER THOUGHT PROCESSES WHILE HELPING THEM WITH THEIR EMOTIONAL DEVELOPMENT AND SOCIAL SKILLS

Purpose: To provide efficient training methods and programs to prevent or to remedy learning problems based on deficits in psychological functions as determined by test results.
Subjects: Pilot studies have been and will be conducted on children of ages 3 to 16 years referred to a clinical school because of learning difficulties; etiology includes minimal neurological dysfunctions, emotional disturbances, developmental lags, and others. Cooperative studies with clinics and public school districts include children with cultural deprivation, mental retardation, and children in regular classes.
Methods: Children are evaluated by quantified tests in perception, language, and higher thought processes, as well as standardized academic achievement tests. (A child's sensory-motor development, social adjustment, and emotional development are also evaluated, but not quantified.) Training programs designed to help a child overcome liabilities in the six develop-

mental areas are then instituted. A program's effectiveness is evaluated by post-testing, teacher and parent rating and observation, academic achievement, and kind of school placement.
Findings: Preliminary pilot studies in the clinical school have shown that such programs are effective in helping an educationally handicapped child return to the regular public school program. Reports from public school districts indicate that the program designed to develop visual perceptual abilities is effective in helping various categories of children learn academic subjects and to adjust to the classroom situation.
Duration: 1957-1967.
Investigator(s): Marianne Frostig, Ph.D., Executive Director, Marianne Frostig Center for Educational Therapy, 7257 Melrose Ave., Los Angeles, Calif. 90046.
Cooperating group(s): Various public school districts.
Publication: Frostig, Marianne and Horne, David, The Frostig Program for the Development of Visual Perception, Chicago: Follett Publishing Company, 1964. A Language Training Program Based on The Illinois Test of Psycholinguistic Abilities, by Marianne Frostig (available from author for research purposes only). Frostig, Marianne, "Education of Children with Learning Difficulties," Distinguished Lectures in Special Education," University of Southern California, Summer, 1962. Frostig, Marianne and Horne, David, "An Approach to the Treatment of Children with Learning Difficulties," Special Child Publications, to be published.

19-QD-1 A DEMONSTRATION-RESEARCH PROJECT IN CURRICULUM AND METHODS OF INSTRUCTION FOR ELEMENTARY LEVEL EDUCABLE RETARDED CHILDREN

Purpose: To test efficacy of a specific curriculum and method for instruction of educable mentally retarded children as compared with standard types of programs.
Subjects: Educable mentally retarded children in 21 experimental and 12 comparison classes.
Methods: Teachers in experimental classes have undergone one year of training in curriculum and method. They will teach under supervision for two years. Children will be assessed in terms of growth in achievement and personality development.
Duration: June 1964-May 1967.
Investigator(s): Herbert Goldstein, Ed.D., Professor and Chairman of Special Education, Graduate School of Education, Yeshiva University, 110 W. 57th St., New York, N. Y. 10019.
Cooperating group(s): Public Schools in Bergen County, New Jersey.

19-QD-2 A SPECIAL PROGRAM FOR IN-SCHOOL 15- TO 18-YEAR OLD MARGINALLY RETARDED AND EMOTIONALLY HANDICAPPED YOUTH

Purpose: To help such handicapped youth remain in school until they have reached their true academic potential, or in leaving, are rehabilitated for training or employment.
Subjects: 80 handicapped youth will be selected each year for special services and study by specially designated school personnel. They will be referred to the JEVS Work Adjustment Center for evaluation and personal and adjustment training during a portion of the school day; they will receive special educational services in school during the balance of the day.
Methods: Psycho-social evaluation; individual and group counseling; remediation in a work setting. Schools will modify instructional methods and curriculum in order to improve the motivation of these youth.

Duration: July 1965-June 1969.
Investigator(s): Saul S. Leshner, Ph.D., Executive Director, and George S. Snyderman, Ph.D., Special Projects Coordinator, Jewish Employment and Vocational Service, 1213 Walnut St., Philadelphia 7, Pa.
Cooperating group(s): Philadelphia Board of Education; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Papers on various aspects of the program will be submitted by staff members to professional journals. Jewish Employment and Vocational Service will prepare progress and other reports which will be available to qualified persons upon request.

19-QD-3 A STUDY AND DEMONSTRATION OF REHABILITATION SERVICES THAT CAN BE PROVIDED FOR EDUCABLE MENTALLY RETARDED YOUTH THROUGH SPECIAL OCCUPATIONAL TRAINING BY USING SCHOOL AND COMMUNITY RESOURCES

Purpose: To establish and test effectiveness of a prevocationally-oriented training program to be developed in secondary special classes for mentally retarded students, integrating resources of school and community.
Methods: School curriculum for students will be built around their occupational experiences, with emphasis on related academic skills and personal development. Abilities and disabilities will be considered in relation to job requirements in order to fit individual to job and follow his job experience as needed. Interviews will be held with parents and employers to help them understand procedures and goals of program.
Duration: January 1964-December 1966.
Investigator(s): Lloyd H. Gillett, Ed.D., Director of Special Education, Eugene School District Number 4, 275 E. Seventh Ave., Eugene, Oreg.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-QD-4 EFFECTIVENESS OF INDIVIDUAL INSTRUCTION (ATTENTION) WITHIN A GROUP SETTING

Purpose: To determine if 20 minutes of daily individual instruction within the classroom, given for a period of 15 weeks, will influence development and behavior; and to find out if nature of instruction makes any difference.
Subjects: 20 retarded preschool children attending classes at the school of the Houston Council for Retarded Children.
Methods: Two classes, 8 to 10 children each, divided into equal groups. One group receives 20 minutes of gross motor exercises daily, given individually. The other receives individual help and attention for an equal period of time in other areas of learning.
Duration: January-May 1965.
Investigator(s): Mary Martha Thompson, Ph.D., Director of Training, Houston Council for Retarded Children, Inc., 3410 Montrose Blvd., Houston, Tex. 77006.

19-QD-5 A PLAN FOR REHABILITATION OF THE MENTALLY HANDICAPPED--"A COORDINATED PROGRAM OF SPECIAL EDUCATION AND VOCATIONAL REHABILITATION WITH THE DEKALB COUNTY BOARD OF EDUCATION"

Purpose: To investigate effectiveness of intensive special education and vocational rehabilitation services offered through a team approach upon

secondary school age mentally retarded individuals.
Subjects: Three special education classes with approximately 90 children in DeKalb County Schools of Georgia.
Methods: Georgia Division of Vocational Rehabilitation will provide consultative services to assist in operation of project. Need for a coordinated curriculum balanced between academic and prevocational training will be thoroughly investigated and developed as a means of smoother transition from world of school to world of work.
Investigator(s): Richard H. Bartlett, Consultant, and Mamie J. Jones, Coordinator, Services for Exceptional Children, Division of Instruction, Georgia State Department of Education, State Office Building, Atlanta, Ga. 30334.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-QD-6 A COORDINATED PROGRAM OF VOCATIONAL REHABILITATION AND SPECIAL EDUCATION SERVICES FOR THE MENTALLY RETARDED

Purpose: To increase the number of adolescent mental retardates being prepared for employment, through establishment of an organized program for evaluation and training of mentally retarded youth, and an ongoing program of cooperative action between a public school system and a rehabilitation agency.
Subjects: Applicants for project services will come primarily from special classes in the Brockton system and will be approaching termination of their formal training. Individuals who are eligible for vocational rehabilitation services and who fall within age range of 15 to 18 years and I.Q. range of 50 to 80 will be accepted for evaluation.
Methods: Students who are accepted by project will be provided with all necessary medical, psychological, and vocational services. Pertinent data about histories, characteristics, attitudes, and/or behavior of the following groups will be collected and analyzed: previous special class students, successful and unsuccessful project students and their families, and participating agency personnel.
Duration: Not reported-June 1967.
Investigator(s): Dorothy M. Singer, Ed.D., Director of Research and Program Planning, and Francis E. N. DeCapot, Massachusetts Rehabilitation Commission, 296 Boylston St., Boston, Mass.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-QD-7 A SELECTED DEMONSTRATION FOR VOCATIONAL TRAINING OF MENTALLY RETARDED YOUTH IN PUBLIC HIGH SCHOOLS

Purpose: To develop procedures for vocational evaluation and training of mentally retarded adolescents by utilizing cooperative concerted efforts of rehabilitation counselors, school administrators, regular class teachers, and special educational personnel. It is expected that through this project one can increase success of rehabilitation of mentally retarded youth.
Subjects: 24 subjects between ages of 15 and 18 are considered experimental. These students are individually matched with a control population on basis of age, sex, intelligence, and socio-economic status.
Methods: Students are enrolled in special education for two or three hours daily and placed in those regular classes within the school that are appropriate to their needs and abilities. When a student appears to be ready for job experiences, he is placed in a series of work samples in the

community designed to provide complete descriptive information of a diagnostic nature about his social skills and abilities as an employee. Following this evaluation he is placed in appropriate training facilities, still in the community, and finally he is involved in permanent placement. Employers participating in evaluation and training portion of project attend monthly employment conferences in which they informally discuss client's present performances and future needs. Experimentals and controls will be compared for "vocational adjustment" at end of project.
Duration: May 1964-August 1967.
Investigator(s): Norris G. Haring, Ed.D., Professor of Education, and Jerry D. Chaffin, Coordinator of Vocational Training and Placement, Medical Center, University of Kansas, Kansas City, Kans.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Kansas Teacher, October 1965.

19-QJ-1 A STUDY OF THE EDUCATIONAL VALUE OF PREKINDERGARTEN PROGRAMS FOR SOCIALLY DISADVANTAGED CHILDREN

Purpose: To empirically evaluate effects of prekindergarten experience on later school achievement of lower socio-economic children.
Subjects: Subjects, randomly selected from an urban population, were born in 1961 and show no indication of severe mental retardation; all subjects reside in a home in which main wage-earning parent is in a lower socio-economic category of Warner Scale.
Methods: Treatment I is a conventional prekindergarten program. Treatment II is a prekindergarten with special emphasis on parent education. Control groups are maintained. Experimental and control subjects are randomly assigned.
Duration: October 1964-June 1970.
Investigator(s): Clarence J. Spain, Ed.D., Research Supervisor, and Vito M. Gioia, Ph.D., School Psychologist, Schenectady Public Schools, 108 Union St., Schenectady, N. Y. 12305.
Cooperating group(s): Louis T. DiLorenzo, Chief, Bureau of School Programs Evaluation, New York State Education Department.

19-QJ-2 EFFECT OF PERCEPTUAL TRAINING ON INTELLIGENCE AND ACHIEVEMENT

Purpose: To study effect of three types of training in organization, orientation, and discrimination on gains in intelligence and achievement. Three media were blocks, puzzles, and reading.
Subjects: Four matched groups of 14 Negro third graders and four matched groups of 16 Caucasian third graders.
Methods: Blocks. Children were taught to reproduce multicolored building suggestions accompanying Halsam Products Co. Blockville Set No. 102. Corrective feedback was given for left to right orientation, chronological organization, and color discrimination. Puzzles. Building suggestions used were same as with blocks. Subjects put together 1 x 1 inch puzzle pieces cut up from building suggestions. Reading. Exercises in McCall Crabbs Standard Test Lessons were administered and discussed. A battery of achievement and intelligence tests was administered before and after training.
Findings: Gains in language I.Q. were greatest for reading group; in non-language I.Q., for blocks. Gains in vocabulary greatest for Caucasians receiving blocks, but Negroes receiving reading. Gains in reading comprehension greatest for Caucasian reading group and Negro puzzle group. Puzzle groups, especially Caucasians, made losses on most variables studied.

Gains and losses were not maintained during no-treatment periods. Duration: May 1964-July 1965. Investigator(s): Norman M. Chansky, Ph.D., Associate Professor of Psychology and Education, North Carolina State of the University of North Carolina, Raleigh, N. C. Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare. Publication: Reprints may be obtained from the author.

19-QJ-3 EARLY TRAINING FOR CULTURALLY DEPRIVED CHILDREN

Purpose: To attempt to improve intellectual functioning and personal adjustment of culturally deprived children through special experiences provided for them in 15 or 27 months preceding entrance into first grade and during first year of school. Subjects: Two groups of approximately 20 children each. Methods: Subjects will be provided two and three special summer school experiences of 10 weeks each. Experiences will center around four classes of variables: (1) attitudes toward achievement, which include achievement motivation, persistence, ability to delay gratification, interest in school-type activities, identification with achieving role models, and parent's attitude toward child's achievement; (2) aptitude for achievement, which includes perceptual development, concept formation, and language development; (3) social and personal development; and (4) improvement in general physical condition. A community worker with training in education and sociology works with parents and children during the year to provide materials, reinforcement, and support for children and parents in terms of experimental variables. Psychiatric consultation will be used to enable staff better to provide experiences conducive to emotional growth and also to check on possible effects of planned intervention. Duration: September 1961-August 1966. Investigator(s): Rupert A. Klaus, Ph.D., Associate Professor of Psychology, and School Psychologist, Murfreesboro City Schools; and Susan W. Gray, Ph.D., Professor of Psychology, George Peabody College, Nashville, Tenn. Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-QJ-4 EFFECTS OF A LABORATORY NURSERY SCHOOL EXPERIENCE ON THREE-YEAR OLD CULTURALLY DISADVANTAGED CHILDREN

Purpose: To determine effects of a five month university nursery school experience on I.Q. scores, speech characteristics, and selected behavioral ratings of a group of culturally disadvantaged children. Subjects: 15 culturally disadvantaged children: 7 males, 8 females; 10 Negroes, 5 whites. Methods: Nursery school program is in operation at Child Development Laboratory, University of Illinois. Teaching for readiness in all areas is of prime concern. Goal of program is "learning to learn" with special foci being language development, cognitive development, and parent motivation for achievement for their children. Evaluation will include analysis of pre- and post-testing on Stanford-Binet I.Q. test, Peabody Picture Vocabulary Test, Templin Screening and Diagnostic Articulation Test (50 item), mean length of response and mean of five longest responses, Behavior Rating Scale, and semistructured parent interviews at Laboratory and in home. Findings: Only the P.P.V.T. scores have been analyzed at this time. Group average of 88.6 had increased to 102.4 during three month test-retest

interval. This increase was significant at the .01 level.
Duration: March-August 1965.
Investigator(s): J. P. O'Neill, Ph.D., Assistant Professor of Child Development, and Q. B. Mills, Ed.D., Associate Professor of Child Development, University of Illinois, Urbana, Ill. (Reported by Janice M. Smith, Ph.D., Head, Department of Home Economics, University of Illinois.)

19-QJ-5 EFFECTS OF ENRICHMENT PROGRAMS ON INTELLIGENCE, PERSONALITY, AND ACADEMIC ACHIEVEMENT OF WELFARE RECIPIENT CHILDREN

Purpose: To develop a theoretical basis for development of compensatory programs for "disadvantaged" children.
Subjects: 120 first and second grade rural children, 60 experimental, 60 control; 50 preschool age urban children, 25 experimental, 25 control.
Methods: Study of rural children is a portion of a continuing investigation begun in 1963. Two divergent school environments are being studied to identify practices which contribute to development of children. Study of urban children will compare development of preschool age children (4-year olds) enrolled in an enrichment program with development of children enrolled in no formal program. Numerous variables related to home, school, and community will be examined.
Findings: Welfare children are retarded upon entry to elementary school. This deficit is cumulative in the common elementary school. Welfare children make slight positive gains in an enriched school program (academic achievement, personality, and mental maturity). Enriched programs for welfare children at the elementary school level do not compensate for experiential restriction in infancy and early childhood.
Duration: 1963-indefinite.
Investigator(s): Joe L. Frost, Ed.D., Assistant Professor of Child Development, Iowa State University, Ames, Iowa.
Publication: Frost, Joe L. and Hawkes, Glenn R., The Disadvantaged Child: A Book of Readings, Boston: Houghton Mifflin (in press) 1966.

19-QJ-6 A PRESCHOOL TRAINING PROGRAM FOR CULTURALLY DEPRIVED CHILDREN (EVALUATION OF "HEAD START")

Purpose: To select a group of culturally deprived children and provide them with special enriching materials (Montessori methods).
Subjects: 60 four-year old children, divided into three groups.
Methods: All subjects will be administered an I.Q. test, an inventory of social maturity, and a readiness test. One group will have Montessori type equipment, one will have traditional equipment; control group is not in "Head Start."
Duration: May 1965-June 1966.
Investigator(s): Armas Tamminen, Ph.D., Professor and Head, Department of Psychology, University of Minnesota; and Richard F. Weatherman, Ed.D., Assistant Superintendent, Duluth Public Schools, Duluth, Minn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

19-QJ-7 PRESCHOOL EDUCATION OF DISADVANTAGED CHILDREN

Purpose: To determine effects of one year of preschool education for disadvantaged children.

Subjects: 21 disadvantaged Negro children, approximately four years of age.

Methods: Subjects attend enriched nursery program for one school year. Program effects on school readiness will be assessed on Gesell Developmental Placement Test.

Findings: Preliminary findings indicate a better rate of readiness development than that expected.

Duration: September 1964-September 1966.

Investigator(s): Sarah S. McCain, M.S., and Thomas K. White, M.S., School Psychologists, Richmond Public Schools, 809 E. Marshall St., Richmond, Va.

Cooperating group(s): Human Development Project, Richmond Public Schools.

Publication: Will be included in final Human Development Project summary; mimeograph will be available at conclusion of study.

19-QJ-8 AN INTER-DISCIPLINARY APPROACH TO IMPROVE DEVELOPMENT OF CULTURALLY DISADVANTAGED CHILDREN

Purpose: To improve culturally disadvantaged children of Alachua County, Florida.

Subjects: Culturally disadvantaged children in Alachua County, Florida, public schools.

Methods: College of Education majors and teaching hospital nursing students will act as participant observers and tutors of selected culturally disadvantaged children.

Duration: September 1964-August 1965.

Investigator(s): Ira J. Gordon, Ed.D., Head, Foundations Department and Professor of Education; Robert L. Curran, Ed.D., Associate Professor of Education; and Donald L. Avila, Ed.D., Assistant Professor of Education, University of Florida, Gainesville, Fla.

Cooperating group(s): Alachua County Public Health Department; J. Hillis Miller Health Center, University of Florida.

19-QJ-9 DEMONSTRATION PROJECT IN PRESCHOOL EDUCATION OF DEPRIVED CHILDREN

Purpose: To develop and field test various methods of intervening with preschool children from disadvantaged backgrounds.

Subjects: Project currently has 600 experimental and 600 control children at nursery, kindergarten, and first grade levels. Subjects attend project schools in seven school districts.

Methods: Language-cognitive preschool program, parent program, social work program.

Duration: September 1963-June 1968.

Investigator(s): Allan S. Hartman, Ed.D., Director; Martin Higgins, M.A., Research Director; and Jeanne Barbour, M.A., Curriculum Specialist, Pennsylvania Department of Public Instruction, Harrisburg, Pa.

Cooperating group(s): Pennsylvania State Department of Public Welfare; cooperating school districts; Ford Foundation.

Publication: Annual reports--September 1964 and October 1965.

19-QJ-10 A MULTIFACETED APPROACH WITH EDUCATIONALLY DISADVANTAGED CHILDREN

Purpose: To help educationally disadvantaged children achieve social, emotional, and educational successes ordinarily not within their level of

expectation, and to demonstrate ways in which home, school, and community can work together to counteract conditions and experiences which may stimulate antisocial behavior.
Methods: Four dovetailing educational approaches: identifying and meeting emotional needs; teaching for critical thinking; identifying and clarifying values; and enhancement of self-percept and self-concept.
Duration: April 1965-April 1966.
Investigator(s): Dr. Laurence Hopp, Department of Curriculum and Instruction, Graduate School of Education, Rutgers, The State University, New Brunswick, N. J.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-QJ-11 EAST HARLEM YOUTH EMPLOYMENT SERVICE, INC. YOUTH AND WORK TRAINING PROGRAM - PROJECT GIANT STEP

Purpose: To establish, in a group of school dropouts, attitudes and roles which allow further self-involvement and growth within vocational settings. Program is designed to foster adjustment to real work situations; to stimulate a desire for continued education and training; and to instill positive attitudes toward work in a group characterized by occupational apathy.
Subjects: 90 boys per year, 16 through 18 years of age, who are officially school dropouts, presently unreferrable for employment, and who are free of advanced personality disorders, severe physical handicaps, or present involvement with courts.
Methods: Experimental program maintains a research orientation designed to include individually-determined participation for each youth, varying in duration of enrollment; to provide an extensive exposure to vocational information and counseling, classes in remedial English and arithmetic, opportunities to work under supervised conditions, and a setting in which to rehearse and experience job-related roles.
Duration: 1962-continuing.
Investigator(s): Robert Hougham, Director, Youth and Work Training Program, East Harlem Youth Employment Service, Inc., 2037 Third Ave., New York 29, N. Y. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)
Cooperating group(s): New York City Youth Board; New York State Division for Youth; New York State Employment Service.

19-QJ-12 JOB OPPORTUNITIES THROUGH BETTER SKILLS (J.O.B.S.)

Purpose: To train currently unemployable youths (many functionally illiterate) to reach educational level and develop attitudes needed for employment; to aid them in acquiring vocational skills; and finally, to place them in employment.
Subjects: 1,000 youths.
Duration: July 1963-September 1964.
Investigator(s): Bruce M. Cole, Project Director, 19 South LaSalle St., Chicago 3, Ill. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1964.)
Cooperating group(s): Chicago Boys Clubs; Chicago Youth Centers; YMCA of Metropolitan Chicago; Illinois State Employment Service; Illinois Department of Vocational Education and Rehabilitation; Cook County Department of Public Aid; Chicago Association of Commerce and Industry; Illinois Commission on Youth Welfare; Mayor's Commission on Youth Welfare; Welfare Council; Office

of Manpower, Automation, and Training, and Bureau of Apprenticeship Training, U. S. Department of Labor; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

19-QM-1 USE OF INITIAL TEACHING ALPHABET (I/T/A), DEVELOPED BY SIR JAMES PITMAN, IN REMEDIAL READING

Purpose: To determine whether retarded readers of normal intelligence can profit from use of i/t/a after limited or no success with other methods of remedial reading; to determine whether there are any neuropsychologic differences between those children who profit and those who do not profit from such instruction.
Subjects: Children of normal intelligence who are two or more years below grade level in reading and have not shown significant progress with prior remedial reading instruction.
Methods: Subjects were selected at random and referred by several routes for consideration for inclusion in remedial reading program which received limited local publicity during its early stages. Each child was administered a WISC test, neurological exam, and reading achievement test. They were placed in fairly homogeneous groups of seven or eight for instructional purposes. Instruction was given on the average of four days a week for 40 minutes per day. Regular school work was not altered but any other formal remedial reading instruction was arbitrarily terminated. Most of the children in program received instruction for 30 to 45 days.
Findings: Majority of children showed moderate to striking improvement in reading ability. A few showed little or no improvement. Degree of improvement was roughly correlated with severity of neurological abnormalities.
Duration: September 1964-August 1965.
Investigator(s): John B. Isom, M.D., Associate Professor of Pediatric Neurology; Judith Brown, M.A., Research Associate in Pediatrics; and Robert D. Boyd, Ph.D., Associate Professor of Medical Psychology, University of Oregon Medical School, Portland, Oreg. 97201.
Publication: Publication is planned. A preliminary report is to be given at 2nd International Meeting on i/t/a at Lehigh University, Bethlehem, Pennsylvania in August 1965.

19-QM-2 EVALUATION OF A SPECIAL EDUCATION PROGRAM FOR CRIPPLED CHILDREN IN NEW YORK CITY

Purpose: To determine influence of special education classes, located within regular school buildings, on development of children with neuromuscular disabilities; to establish basis for continuation of study in terms of family interaction patterns, personality and mental development (sexual identity, conceptual and creative abilities), follow-up of rejectees, comparisons with nonhandicapped children of presumably equal intellectual potential, and development of new evaluative methods; and to make tentative determination of efficiency of current program.
Subjects: All children placed in program during the period September 1965-January 1966, and to the extent that resources permit, those accepted but put on a waiting list.
Methods: At the beginning, and after intervals of six months and one year, three categories of data will be obtained, as follows: (1) medical/physical status--sensorimotor capacities (by physician); (2) psychological functions--academic achievement, intellectual ability, and emotional and social aspects of personality function (by psychologist); and (3) social--assessment through family interview data (social worker) and observational data (participant-

observers). All data will be gathered in terms of existing tests or modifications of them that are dictated by conditions of testing.

Duration: June 1965-September 1967.

Investigator(s): Harold Jacobziner, M.D., (deceased), formerly Assistant Commissioner of Maternal and Child Health, New York City Department of Health, 125 Worth St., New York, N. Y. 10013. (Reported by Levon Kabasakalian, Ph.D., Medical and Health Research Association of New York City, Inc., Room 720, 40 Worth St., New York.)

Cooperating group(s): New York City Department of Health; New York City Board of Education; United Cerebral Palsy of New York City, Inc.; Office of Education, U. S. Department of Health, Education, and Welfare.

Publication: Findings will be made available, as soon as feasible, through publications and papers presented at professional meetings.

19-QM-3 AUDITORY DISCRIMINATION TRAINING IN THE DEVELOPMENT OF WORD ANALYSIS SKILLS

Purpose: To develop effective self-instructional procedures for testing relationship of auditory discrimination to selected tasks in reading.

Subjects: Approximately 300 kindergarten children with selected backgrounds.

Methods: Experimental study calling for administration of a number of training programs and a study of effects of training upon subsequent learning tasks.

Findings: Work to date has focused upon development of training materials which best exemplify variables associated with auditory discrimination.

Duration: June 1965-December 1966.

Investigator(s): John D. McNeil, Ed.D., Associate Professor of Education, University of California, Los Angeles 24, Calif.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publication: Monograph to be published.

19-QM-4 USE OF VISUAL MEMORY AND TEACHING WRITTEN COMPOSITION TO DEAF CHILDREN

Purpose: To investigate use of programming as a medium for establishing memory traces for use of function words in language patterns of deaf children.

Subjects: 38 deaf children from intermediate grades of a state residential school for the deaf.

Methods: A program of self-instruction in which prompts were faded leading to recall of units of content material, including selected function words, until subjects could recall and reproduce complete sentences in correct syntax.

Findings: The deaf child can learn correct use of function words through programmed instruction; but once learned, skill should be reviewed and practiced in written compositions.

Investigator(s): Mary Lou Rush, M.S., Research Associate, Department of Speech Science, Ohio State University, Columbus, Ohio.

19-QM-5 EVALUATION OF THE YOUTH TRAINING AND EMPLOYMENT PROJECTS OF THE YOUTH OPPORTUNITIES BOARD OF GREATER LOS ANGELES

Purpose: To describe and evaluate operation of two experimental and

demonstration projects of the Office of Manpower, Automation, and Training of the U. S. Labor Department; and to describe aspects of programs applicable to other areas and to indicate aspects of these programs which demand additional inquiry.
Subjects: 1,000 youth, approximately 50 percent Negro and 50 percent of Mexican-American descent, half of whom have been served by Youth Training and Employment Projects. Eligibility criteria: age 16 to 22, out of school, unemployed, with special employment problems, living in one of two project areas.
Methods: Interviews with youth on precoded schedules; interviews with other interested or concerned individuals in terms of subjects in an outline form appropriate to the individual or agency.
Duration: October 1964-April 1966.
Investigator(s): Paul M. Sheldon, Ph.D., Professor and Chairman, Department of Sociology and Anthropology; Irwin Mahler, Ph.D., Professor and Chairman, Department of Psychology; and E. Farley Hunter, LL.B., Research Consultant, Laboratory in Urban Culture, Occidental College, Los Angeles; and George Fargo, Ph.D., Associate Professor of Educational Psychology, San Fernando State College, Northridge, Calif.
Cooperating group(s): Office of Manpower, Automation, and Training, U. S. Department of Labor.
Publication: Manuscript to be submitted to U. S. Department of Labor in April 1966.

19-QM-6 TEACHING HOMEBOUND PUPILS BY TELEPHONE IN LOS ANGELES

Purpose: To appraise a system by which groups of homebound children are given full-time instruction via telephone. Program provides as nearly as possible the same educational opportunities as are available to pupils able to attend special classes.
Subjects: 26 children with permanent or temporary physical disabilities, expected to be in teleteaching for at least five months.
Methods: Individual study of each pupil; questionnaires for pupils, parents, teleteachers, and teachers of former teleteaching pupils.
Findings: Analysis of semester grade averages indicated that satisfactory educational progress, commensurate with ability, had been achieved by pupils in teleteaching. Parents, pupils, and regular classroom teachers were pleased with results of program. Used in conjunction with television, radio, and programmed instructional materials, teleteaching becomes the next best method to having the child present in school.
Duration: September 1963-November 1965.
Investigator(s): Dorothy B. Carr, Ed.D., Supervisor, Crippled and Delicate, Special Education Branch, Los Angeles City Schools, Los Angeles, Calif. (Reported by Ernest P. Willenberg, Ed.D., Director of Special Education, Los Angeles City Schools.)
Publication: Exceptional Children 31:118-126, November 1964.

19-QM-7 HOME TRAINING PROGRAM FOR DEAF INFANTS

Purpose: To establish and evaluate an educational program to be carried out in homes of deaf children between 7 and 42 months of age.
Methods: Deaf infants up to 42 months of age who have participated in a home training program will be compared with deaf children who have begun formal training at approximately 42 months of age. Comparisons will be made on basis of spectrographic analyses, listener judgments, and standardized tests of psycholinguistic abilities.

Duration: 1964-1968.
Investigator(s): Robert L. McCroskey, Ph.D., Director of Teacher Training, Atlanta Speech School, Inc., 2020 Peachtree Rd., NW, Atlanta 8, Ga.
Cooperating group(s): Division of Chronic Diseases, Public Health Services, U. S. Department of Health, Education, and Welfare.

SOCIAL SERVICES

19-RA-1 CHICAGO CHILD WELFARE COST STUDY

Purpose: To determine uniform costs in institutional care for children, foster care, and adoption service.
Subjects: 36 child welfare agencies in the Chicago area.
Methods: Institutional cost studies, based on adaptation of manual of Child Welfare League of America. Approaches for cost analysis of foster care and adoption to be developed during the two-year project.
Duration: July 1965-July 1967.
Investigator(s): Leroy H. Jones, M.S.W., Director, Welfare Cost Analysis Project, Welfare Council of Metropolitan Chicago, 123 W. Madison St., Chicago 2, Ill. (Reported by Sidney E. Zimbalist, Research Director, Welfare Council of Metropolitan Chicago.)
Cooperating group(s): Community Fund of Chicago; Chicago Community Trust; Frank Woods Charitable Trust; Illinois State Department of Children and Family Service.

19-RA-2 1963 SURVEY OF MOTHER-CHILD BENEFICIARY UNITS UNDER OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE

Purpose: To study the socio-economic situation of widowed mothers and children entitled to survivor benefits under the OASDI program. Particular attention was given to financial situation, living arrangements, health insurance coverage, and employment status of mother-child beneficiary groups as well as to educational attainment, day care patterns, and health care of paternal orphans.
Subjects: Mother-child beneficiary units consisting of an unremarried widowed mother with at least one child under age 18 in her care all of 1962 and who had received an OASDI benefit check in January 1962 or earlier.
Methods: Survey was based on a two-stage national area probability sample of mother-child units selected from a universe of 895,000 survivor families who were receiving social security benefits as of September 1962 and who lived in the conterminous United States, Alaska, and Hawaii. The final sample included 1,068 interviews, representing 416,000 mother-child beneficiary units, conducted in March and April 1963 by the Bureau of the Census, was responsible for collecting and tabulating the data.
Investigator(s): Erdman B. Palmore, Chief, Beneficiary Studies Section, Economic and Social Surveys Branch, Division of Research and Statistics, Social Security Administration, U. S. Department of Health, Education, and Welfare, 6401 Security Blvd., Baltimore, Md. 21235.
Cooperating group(s): Bureau of the Census, U. S. Department of Commerce.
Publication: Analysis of data and survey findings to be presented as a monograph in 1965.

19-RA-3 AN INVESTIGATION OF LEGAL AND SOCIAL WORK PRACTICE IN TERMINATION OF PARENTAL RIGHTS

Purpose: To describe a group of cases that evoke professional intervention of both lawyers and social workers in the effort to evaluate current practice, isolate points of difference and agreement between the two professions in their approach to cases, and explore the basis for more effective communication between social agencies and courts in termination practice.
Methods: Two groups of case records will be examined retrospectively: a sample of termination cases disposed of by Children's Division of County Court of Milwaukee County during 1963; and a sample of current child welfare agency cases that will indicate aspects of agency planning that may or may not eventuate in a subsequent court referral. Reasons for referral or nonreferral will be explored. Data from case records will be supplemented by interviews with court and agency staff as indicated. A later phase of study will explore attitudes of members of both professions toward termination through interviews in depth.
Duration: December 1963-July 1966.
Investigator(s): Alan D. Wade, Ph.D., and Margaret K. Rosenheim, J.D., Associate Professors, School of Social Service Administration, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RA-4 ANALYSIS OF GAPS IN SERVICE TO MENTALLY RETARDED AS EXPERIENCED BY INFORMATION-CONSULTATION SERVICE FOR THE RETARDED

Purpose: To determine gaps in community services to mentally retarded; to account for these gaps in services in such a way as to indicate who are the agents of the gaps, and what changes should be sought in those agents to eliminate said gaps in service.
Subjects: Persons requesting help in finding service for individual mental retardates.
Methods: Analysis of 300 case records of Information and Consultation Service.
Findings: Requests for help in finding services for mentally retarded persons from suburban counties were higher, from urban counties equal, and from rural counties less than the respective county proportions of the state's total population. However, requests from urban county were much more frequently met than requests from nonurban counties. Types of service most frequently unavailable for retardates were: counseling for problems in interpersonal relationships; education; leisure time and socialization program; and training for employment. Requests were most frequently for retardates in age group five to 10 years, 14 to 20, and 21 and over, in that order. Of these three age groups, the 14- to 20-year olds requests most frequently went unmet.
Duration: August 1963-April 1964.
Investigator(s): Robert R. Mayer, M.S., Research Director, Rhode Island Council of Community Services, Inc., 333 Grotto Ave., Providence, R. I.
Cooperating group(s): Information-Consultation Service for Mentally Retarded; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Report by Rhode Island Council of Community Services, Inc.

19-RA-5 ACCEPTANCE OF CERTAIN YOUTH PROGRAMS AND SERVICES BY RURAL FAMILIES IN NORTH CAROLINA

Purpose: To determine sources from which parents of young children received information and services regarding child care and development; types of information and services regarding child care and development which were received; and types or sources of information and services for which parents of young children express a need.
Subjects: Approximately 450 mothers of children in first six grades in school.
Methods: Data will be collected in tape-recorded interviews with subjects. An interview guide, modified and pretested for this age group, will be used and data will be transcribed onto a data analysis form based on the guide. Data will be coded and punched on cards for machine processing. Frequencies of responses to subclassifications relative to sources types, and information and services desired will be tabulated. Certain demographic variables will be related statistically to subclassifications of information under general headings stated in objectives.
Duration: 1964-1967.
Investigator(s): Irwin V. Sperry, Ph.D., School of Home Economics, University of North Carolina at Greensboro, Greensboro, N. C.
Cooperating group(s): Cooperative State Experiment Station Service, U. S. Department of Agriculture.

19-RA-6 CHILD WELFARE CURRICULUM PROJECT

Purpose: To determine training needs of child welfare workers who do not have a Master's degree in social work; to examine differences between professional and nonprofessional social workers as a basis for developing an intensive short-term resident training program.
Subjects: 30 professional and 30 nonprofessional child welfare workers employed in Wisconsin public agencies.
Methods: Subjects were interviewed to obtain information on their basic career characteristics and job settings, to probe their attitudes toward some of their daily experiences, and to obtain an overall view of the feeling of public child welfare services in Wisconsin. Subjects were also interviewed about two of their cases to gather data on characteristics of case handling. It was assumed that differences between two groups of workers and the way in which they viewed and carried out their jobs could serve as a basis for curriculum development.
Findings: Differences were found between child welfare workers with professional education and those without in their diagnostic frame of reference, their understanding of helping process, their behavior and activities in "intake" and "service" phases of case handling, and in their role orientation and functioning.
Duration: November 1962-September 1965.
Investigator(s): John F. O'Neill, M.A., Lecturer in Social Work, Extension Division and School of Social Work, University of Wisconsin, Milwaukee, Wis.
Cooperating group(s): Division for Children and Youth, Wisconsin State Department of Public Welfare.
Publication: O'Neill, John F. and Pflanczer, Steven I., Profiles in Child Welfare Service: A Study of Differentially Trained Social Workers, Milwaukee: The University of Wisconsin Extention Division, 1965 (in press).

19-RA-7 STUDY OF SOCIAL SERVICES TO FAMILIES AND CHILDREN IN ERIE COUNTY, OHIO

Purpose: To assist citizens of Erie County in the analysis of some of the social problems which face them, and in delineating social needs resulting from these problems. Study is concerned primarily with three serious community problems: delinquency and social maladjustment among children, parental neglect, and poverty-dependency.
Methods: Examination of various community agencies and evaluation of their combined effectiveness in attacking problems of the community.
Duration: March 1963-1964.
Investigator(s): Charles H. Shireman, M.A.; Ray A. Carter; Leonard Voorhees; John P. Kemph, M.D.; and Maurice O. Hunt, M.A., National Study Service, 44 E. 23rd St., New York, N. Y. 10010. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)
Cooperating group(s): Sidney Frohman Foundation; Citizens Committee for Youth Services.

19-RA-8 COST ANALYSIS IN CHILDREN'S INSTITUTIONS

Purpose: To develop a method for computing cost of child care in an institution which would be more meaningful, more accurate, and more comparable from one setting to another than traditional institutional per capita cost.
Duration: 1963-1966.
Investigator(s): Robert Elkin, M.S.W., Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Winter 1964-1965.)
Cooperating group(s): Child Welfare League of America; Field Foundation.

19-RD-1 EVALUATION AND ANALYSIS OF GROUP WORK SERVICES

Purpose: To evaluate social group work services offered to deviant students in five public school systems in Michigan.
Methods: In order to measure student change, a control group design is employed, and a series of before-and-after measures, obtained from student questionnaires, from teacher rating forms, and from school records will be analyzed. Changes noted in students treated through group work method will be linked to specific actions engaged in by practitioner with or on behalf of deviant students. To accomplish this objective, practitioners will be interviewed and their records will be examined. Codification of practitioner activities will be completed, and applied to records and interviews. With these two types of data, that pertaining to changes in students in specific areas of school functioning, and that pertaining to practitioner actions directed at improving these particular areas of functioning, it will be possible to relate specific practitioner activities directly to specific changes produced by this method of treatment.
Duration: Not reported-June 1966.
Investigator(s): Maeda J. Galinsky, Ph.D., School of Social Work, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-RD-2 REALIZING THE POTENTIAL OF UNDERPRIVILEGED YOUTH

Purpose: To describe currently existing levels of aspirations and achievement among youth of the Negro community and their parents; to determine which forces in the community help or hinder these aspirations; and to establish a baseline against which to measure effectiveness of the action program.
Methods: A comprehensive program of ameliorative activity, creatively involving all of the community resources, will attempt to replace current attitudes of resignation, complacency, and resentment in respect for significance of education and a desire and drive for higher achievement on the part of Negro youth.
Duration: Not reported-1968.
Investigator(s): Richard M. Sax, M.S.W., Executive Director, Contra Costa Council of Community Services, 2717 N. Main St., Suite 9, Walnut Creek, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-RD-3 SOCIAL CHANGE AS A FUNCTION OF COMMUNITY EDUCATION

Purpose: To mobilize community leadership for developing programs which will reduce youth problems; and to evaluate community and organizational change as well as resultant action programs.
Methods: Program method includes engagement of local residents, high school students, and agency representatives in a data-based community study process. Crenshaw study seminars serve as a baseline for systematic planning and community-based responsibility for implementing action programs. Community study seminars include discussion of data regarding social conditions, youth problems, and available resources throughout community. By questionnaires and interviews, participating organizations are studied for differences in attitudes and organizational structure as well as for long-term change in service allocations. Individual research designs are developed for specific action programs developed by the project.
Findings: Project has led to a number of locally based action programs including pro-school, tutoring, and community youth organization programs. Community education has been increased through news reports, a speaker's bureau, and additional seminar activities. Evaluative designs have been developed for each program.
Duration: March 1964-February 1967.
Investigator(s): Herbert R. Sigurdson, Associate Director, and Donald G. Dodge, Youth Studies Center, University of Southern California, Los Angeles 7, Calif.
Cooperating group(s): Ford Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Sigurdson, Herbert R.; Dodge, Donald G.; and Shanahan, Patricia A., *Crenshaw Community Study Curriculum*, Los Angeles: Youth Studies Center, 1965. Board of Corrections Monograph No. 4, *Correction in the Community: Alternatives To Incarceration*, Sacramento: Board of Corrections, 1964. (pp. 7-18)

19-RJ-1 NATIONAL STUDY OF ADOPTION

Purpose: To gain long-term, comprehensive information on development of an unselected sample of adopted children. It is hoped to make comparisons not so much with "normal children" as with children who are experiencing other forms of substitute care.

Subjects: Some 250 adopted children drawn from the National Child Development Study (1958 cohort).

Methods: Parents of all the children will be interviewed, making use of a structured schedule.

Duration: March 1965-1967.

Investigator(s): M. L. Kellmer Pringle, Ph.D., Dip. Ed., Director of National Bureau for Cooperation in Child Care, Adam House, 1 Fitzroy Sq., London, W.1, England.

Cooperating group(s): Home Office.

19-RM-1 FOSTER HOME EDUCATIONAL PROJECT

Purpose: To analyze results of a centralized program of foster home recruitment on behalf of public and voluntary child placement agencies in Philadelphia, Delaware, and Montgomery Counties, Pennsylvania.

Subjects: Prospective foster family applicants requesting referral between October 1, 1962 and September 30, 1964.

Methods: Information (number, selected characteristics, and disposition) about all inquiries received by the project were cumulated and analyzed. Course of all referrals to participating agencies was followed from initial inquiry to final disposition by means of periodic inquiries addressed to participating agencies. These data were analyzed in terms of: (1) process factors, e.g., time; (2) agency expectation factors, e.g., number in family, stability of marital relationships; and (3) foster family expectation factors, e.g., amount of board payment.

Findings: Most effective means of recruiting foster homes was found to be a broad base publicity campaign: radio, television, and newspaper stories and spot announcements in continuous and regular flow. Only one out of 16 of the inquirers of the project turned out to be approved as a foster home. Limiting factors include shortages in agency home-finding staffs and low payment to foster parents for care of child.

Duration: October 1962-May 1965.

Investigator(s): Marie E. Costello, D.S.W., Research Associate, Health and Welfare Council, Inc., 1617 John F. Kennedy Blvd., Philadelphia, Pa. 19103.

Cooperating group(s): Seybert Institution; Dolfinger-McMann Foundation.

Publication: Research report available from the Health and Welfare Council, Inc. The combined report of the recruitment program and the research will be published in *Child Welfare*, October, 1965.

19-RM-2 STUDY OF FOSTER FAMILIES AND THEIR PUBLIC IMAGE

Purpose: To investigate various aspects of foster families and foster family life using data already collected by The Health and Welfare Council of Baltimore; to obtain information on the public image of foster care; and to estimate the type and degree of deviance in foster families and to relate attitudes and actions to success as foster parents.

Subjects: 475 foster mothers and 350 foster fathers who answered mail questionnaires; 86 foster mothers who were interviewed; a randomized sample of 163 women who were interviewed in respect to their views of foster care.

Methods: Analysis and correlation of data on personal and social attributes, attitudes, values, child-rearing practices, and family interrelationships.

Duration: 1964-1966.

Investigator(s): Dorothy K. Howerton, Ph.D., Professor, School of Social Work, Boston College, 126 Newbury St., Boston, Mass.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-RM-3 SIX YOUNG CHILDREN IN TEMPORARY FOSTER PLACEMENT

Purpose: To study the behavior of six young children (17 to 33 months old) cared for in investigators' home during separation from mother, with some appraisal of their state before and after separation; to collect on interview basis data on larger number of similar subjects cared for by familiar relatives.
Methods: Every effort will be made to mitigate the experience--unlike traditional institutional studies children will not be ill, in strange setting, or subject to multiple nursing. In weeks preceding separation, interchange visits familiarize child with investigators' family and home; during separation, investigators provide continuity of care and direct observation 24 hours a day, supplemented by checklists, etc. After separation, visits are scheduled to check sequelae including child's attitude to former foster parents and to film of separation situations. Filming is done throughout. Social worker does complementary study, based on daily visits to children in care of relatives.
Duration: June 1965-May 1968.
Investigator(s): James Robertson, A.A.P.S.W., Psychoanalyst, and Joyce Robertson, Tavistock Child Development Research Unit, 2 Beaumont St., London, W.1, England.
Cooperating group(s): Grant Foundation.

19-RM-4 FOSTER HOME SURVEY

Purpose: To examine existing foster care program of the Youth Authority's Division of Parole to determine ways of strengthening and augmenting this service; to incorporate these improvements in an experimental design; and to test hypothesis that improved foster care would result in improved parole performance of foster home wards.
Methods: Information of California Youth Authority foster care program and on wards involved is being collected.
Duration: Not reported-1964.
Investigator(s): Keith S. Griffiths, Ph.D., Chief, Research Division; Bertram M. Johnson; Perry Hall; and Abraham Scop, California Department of the Youth Authority, 401 State Office Building No. 1, Sacramento 14, Calif.; and Maurice O. Hunt, M.A., Director, National Study Service, 44 E. 23rd St., New York, N. Y. 10010. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Summer 1964.)
Cooperating group(s): National Study Service; California Department of Social Welfare.

19-RM-5 SOME FACTORS CONTRIBUTING TO BREAKDOWN OF CHILDREN IN "SCATTERED COTTAGE HOMES"

Purpose: To learn why children placed in cottage homes as an alternative to long-term institutionalization fail to remain there.
Subjects: 46 children, 18 girls and 28 boys, who had been deserted by their parents, were not available for adoption, or failed to settle down in foster homes, were placed in cottage homes of the Children's Welfare and Public Relief Department of Adelaide, Australia. 11 of them, or 24 percent, failed to remain there.
Methods: Case histories, before and during cottage home placement, personality and intellectual scales, and other relevant data concerning this group of failures are being investigated.
Duration: February-May 1964.

Investigator(s): M. O. Oswald, Children's Welfare and Public Relief Department, Box 39, Rundle Street P. O., Adelaide, S. A., Australia. (Reported in Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency, Summer 1964.)

19-RP-1 BOSTON DIVISION OF CHILD GUARDIANSHIP DAY CARE PROJECT

Purpose: To assess motivations and decision-making process in families requesting day care for children under the age of three in the Boston area; and to determine what types of services are requested.
Subjects: 75 families who either have already or are planning to use day care.
Methods: A single diagnostic, semistructured interview done in the home by an experienced caseworker. Mothers are usually seen alone.
Findings: Cross section of community, white and Negro, wide range of income and education, with high proportion requesting day care for child under a year old. Considerable interest in counseling, both intake and ongoing, plus possibility of family and small group day care.
Duration: June 1964-August 1965.
Investigator(s): Jane L. Warner, M.S.S.S., M.Ed., Director of Day Care Project, Boston Children's Service Association, 1-3 Walnut St., Boston 8, Mass. (Reported by Constance Rathbun, Director of Research and Training, Boston Children's Service Association.)
Cooperating group(s): Division of Child Guardianship, Boston Department of Public Welfare.
Publication: Results will probably be mimeographed and available on request.

19-RP-2 CHILD DAY CARE ARRANGEMENTS OF MOTHERS WORKING IN INDUSTRY IN THE BALTIMORE AREA

Purpose: To provide information on types of child day care arrangements made by mothers working in the Baltimore area; to supplement information from another day care study on administration, licensing, and availability of child day care facilities in Maryland, in cooperation with Governor's Commission To Study Child Day Care in Maryland.
Subjects: 1,651 working mothers employed in 35 private industries, state agencies, and a large federal agency.
Methods: Use of questionnaire distributed through employers on a voluntary, anonymous basis. Questionnaire kits included a self-addressed, stamped return envelope. Because of voluntary, anonymous participation, no follow-up was possible and the return from 1,651 full-time working mothers represented 33 percent of the 5000 questionnaires distributed.
Findings: 34.5 percent of working mothers depended on their families for child day care; 12.7 percent on friends and neighbors; 16.1 percent on paid baby sitters; 9.1 percent on husbands working opposite shift; and 6.3 percent on day care centers. Only 104 of 1,651 mothers used day care centers. Professional women favored day care centers most; service industry workers the least. Weekly salaries ranged from $114.81 for professional women to $65.16 for service industry workers.
Duration: February 1964-February 1965.
Investigator(s): Joseph M. Szuleski, M.A., Research Analyst, Maryland State Planning Department, 301 W. Preston St., Baltimore 1, Md.
Cooperating group(s): Maryland State Department of Public Welfare.
Publication: Limited supply of studies is available.

19-RS-1 CHILDREN OF MENTALLY ILL PARENTS IN DEPRIVED AREAS

Purpose: To demonstrate values of intensive casework services in families with emotionally ill mothers in relation to adequate child care; to compare a group of families provided intensive casework services with those where such services were not offered to families; and to analyze impact of emotional illness of mother on physical and emotional health of children.
Subjects: 120 families in which the mother was seen by psychiatrists in emergency rooms of Boston City Hospital or Massachusetts General Hospital.
Methods: Two groups of cases will be studied: (1) demonstration families where intensive social casework services will be offered and provided continuously for a period of one year to families in which the mother has been emotionally ill in order to determine best child care planning for the children; and (2) control families where no additional casework services will be offered but where problems in child care will be studied through research interviews. Research interviews three times in the study year will be carried out by social caseworkers to determine problems in the family, especially in relation to needs of children. Results of research interviews of problems in demonstration families will then be compared in control families.
Duration: January 1965-December 1967.
Investigator(s): Elizabeth P. Rice, M.S., Associate Professor of Social Work in Public Health, and Leo Miller, Ph.D., Research Associate in Social Work, School of Public Health, Harvard University, 55 Shattuck St., Boston, Mass. 02115.
Cooperating group(s): Boston City Hospital, Department of Psychiatry; Massachusetts General Hospital, Department of Psychiatry; North Suffolk County Mental Health Center, East Boston; Boston Public Welfare Department.
Publication: Findings will be published and compared with two previous studies of child care needs of mentally ill parents.

19-RS-2 A STUDY OF CHILDREN'S SERVICES IN CALIFORNIA

Purpose: To develop throughout the State, comprehensive and consistent services for protection and care of the neglected child or the child showing early signs of social maladjustment. Special attention will be given to steps necessary to improve care in the child's own family, as well as in various forms of foster care.
Methods: Extensive field work and other fact-gathering methods will be used to secure a statewide picture of needs of neglected children and services now available. These facts will be weighed against range of services commonly accepted as desirable for an effective child welfare program. Recommendations will be developed for a plan for development of a comprehensive pattern of service throughout the State.
Duration: March 1964-June 1965.
Investigator(s): Maurice O. Hunt, M.A., Director, National Study Service, 44 E. 23rd St., New York, N. Y. 10010. (Reported in *Current Projects in the Prevention, Control, and Treatment of Crime and Delinquency*, Winter 1964-1965.)
Cooperating group(s): State of California.

19-RT-1 IMPACT OF RECENT LEGISLATION ON CHILD ABUSE IN SELECTED MIDDLE-ATLANTIC STATES

Purpose: To examine, on an exploratory basis, the impact of recently enacted legislation in a number of Middle-Atlantic States on identification of abused children and on effectiveness of services in their behalf.

Subjects: Official and voluntary agencies in selected Middle-Atlantic States--Pennsylvania, New Jersey, Massachusetts, Connecticut, and New York; and all registered cases of child abuse under the new law in New York City from July 1, 1964 to July 1, 1965--over 300 cases.
Methods: Interviewing professional staff of responsible service agencies in the five selected states, to provide descriptive background of statewide experience in the region under different administrative and legal patterns; abstracting information from records of all cases of child abuse registered in New York City during the first 12 months under the new legislation, to describe epidemiologic and demographic characteristics of families involved and administrative patterns which have evolved in handling the cases.
Duration: April 1965-1966.
Investigator(s): Elinor F. Downs, M.D., M.P.H., Assistant Professor of Public Health Practice, and Betty Simons, M.D., M.P.H., Assistant in Public Health Practice, School of Public Health and Administrative Methods, Columbia University, 600 W. 168th St., New York 32, N. Y.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RT-2 EPIDEMIOLOGIC STUDY OF CHILD ABUSE--DEVELOPMENTAL PHASE

Purpose: A multiphased nationwide study of child abuse. Initial phase will investigate cases of child abuse reported in states having mandatory reporting legislation. Subsequent phases of research will investigate cases of child abuse not reported through mandatory reporting systems. Last phase will assess effects of community measures in treatment and prevention of child abuse.
Methods: National survey, gathering and analysis of news clippings, interviews, community relations activities on national, state, and local levels, etc.
Duration: June 1965-indefinite.
Investigator(s): David G. Gil, D.S.W., Assistant Professor, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Mass. 02154.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RT-3 A STUDY OF NEGLECT AND ABUSE OF CHILDREN AFTER PROTECTIVE SERVICE

Purpose: To evaluate the effectiveness of alternative programs of service intended to reduce the recurrence of neglect and abuse of children in families known to protective service agencies.
Subjects: Families previously served in an intensive service project and selected samples of contrast population.
Investigator(s): Harold Lewis, D.S.W., Professor of Social Research, and Julius A. Jahn, Ph.D., Professor of Social Research and Director, Research Center, School of Social Work, University of Pennsylvania, 2410 Pine St.; and Julia Ann Bishop, Executive Director, Philadelphia Society to Protect Children, Philadelphia, Pa.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RT-4 A PROTECTIVE SERVICES CENTER TO PROVIDE A RANGE OF SERVICES FOR FAMILIES IN WHICH CHILDREN ARE NEGLECTED OR ABUSED

Purpose: To demonstrate the effectiveness of an integrated approach in providing the varied services needed by families in which children are neglected or abused; and to develop new treatment approaches through using combinations of professional skills and by training nonprofessional personnel to work with children and parents.
Investigator(s): Marion J. Spasser, Project Director; Barbara Rocah, M.D., Psychiatric Consultant; and G. Lewis Penner, Executive Director, Juvenile Protective Association, 12 E. Grand Ave.; and Mary Sullivan, Associate Professor, Jane Addams Graduate School of Social Work, University of Illinois, Chicago, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RT-5 STUDY OF CHILD PROTECTIVE SERVICES

Purpose: To study child protective services offered by public welfare departments on behalf of children in their own homes who are subjected to parental neglect and abuse and whose parents do not voluntarily seek help.
Methods: A combination of structured instruments, analysis of documents, focused interviews, and direct observation.
Investigator(s): Andrew Billingsley, Ph.D., Assistant Professor, School of Social Welfare, University of California, Berkeley, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-RX-1 DIAGNOSIS AND CORRECTION OF EDUCATIONAL DISABILITY

Purpose: To determine educational deficits of children in foster home and residential care, and to correct these deficits through remedial tutoring.
Subjects: All school-age children in care of Association for Jewish Children in Philadelphia who are failing in one or more subjects, or who, in standard achievement tests, are significantly under grade level.
Methods: Extensive psychological and achievement testing; diagnosis of learning problem; and corrective measures through tutoring and collaboration with school teachers and counselors.
Duration: September 1963-August 1965.
Investigator(s): Olive John Morgan, Ph.D., Chief Psychologist, Association for Jewish Children of Philadelphia, 1301 Spencer St., Philadelphia 41, Pa. (Reported by Joseph L. Taylor, M.S.W., Executive Director, Association for Jewish Children of Philadelphia.)
Publication: Article for Child Welfare.

19-RX-2 A MUTUAL FAILURE OF LAW AND PSYCHIATRY: THE "CHILDREN IN LIMBO" BETWEEN CLINIC AND COURT

Purpose: To define causative factors which contribute to "child in limbo" problem; to generate "solution-seeking" ideas leading to possible avenues of clinical and/or community action; and to raise definitive questions for research.
Subjects: Predelinquent children referred from court and its agencies to

Child Guidance Clinic, and also those children referred from Clinic to court.
Methods: Records of Clinic over past ten years are reviewed and analyzed for causes of deficits in community service given to these children and their families. Cases are categorized in an attempt to find common characteristics of group, basis for refusal of service, and causative social or community factors which contribute to it. Ideas for action toward a possible solution are set forth as well as questions raised for future research.
Findings: In analyzing surface reasons for agency refusal of service, namely legal eligibility by court, clinical and/or client motivation by clinic, it appears these reasons are often defensive rationalizations for other more basic issues underlying "child in limbo" problem. These more basic issues are: (1) the philosophic differences between a "voluntary" and "involuntary" agency, reflecting culturally entrenched dichotomous idea that badness needs force and punishment, and sickness needs tender loving care; (2) the tendency for each agency to view the other with suspicion, distortion, and disappointment regarding the other's role and function; and (3) the tendency toward agency "procedure rigidity" in their respective service functions.
Investigator(s): Morris Weiss, M.D.; F. Robert Wollaeger, M.A.; and Eleanor Keys, Oakland Child Guidance Clinic, 113 Franklin Blvd., Pontiac, Mich.

19-RX-3 SYRACUSE SCHOLASTIC REHABILITATION RESEARCH PROJECT

Purpose: To clarify impact of various roles of the mental health specialist within the school setting upon the child's total school adjustment patterns.
Subjects: 60 emotionally handicapped children in grades one through six.
Methods: Roles to be compared for effectiveness are: clinician consultation with the child's teacher, regular clinician-child counseling sessions, clinician counseling sessions with the child's parents, and combinations of the above. Subjects will be divided between regular and special classes with a control group of disturbed children receiving no clinician "treatment." Dependent variables of child adjustment for which instruments have been adapted or developed include academic adjustment, behavioral deviation, group interaction, peer and self valuation.
Duration: 1964-1966.
Investigator(s): Sherwin S. Radin, M.D., School Psychiatrist; Sherwood B. Chorost, Ph.D., Clinical Psychologist; and Gene L. Cary, M.D., Assistant School Psychiatrist, Syracuse City School District, 409 W. Genesee St., Syracuse, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-RX-4 INSTITUTIONALIZATION OF CHILDREN

Purpose: To investigate whether there is such a thing as the "institutionalized child" with specific personality characteristics; to ascertain when and on what basis children should be returned home or "de-institutionalized;" to demonstrate intake service for children referred to two experimental local welfare offices for institutional placement; to develop services in the community as alternatives to placement; to compare these demonstration results with results of normal ongoing intake procedures in two control welfare agencies; and to demonstrate how specific children are selected for return home from institutions, the kind of service which must accompany this process, and how these children turn out.

Subjects: Dependent and neglected Israeli children, one day to 14 years of age.
Duration: January 1962-January 1966.
Investigator(s): Lester D. Jaffe, D.S.W., Research and Teaching Fellow in Social Work, Paul Baerwald School of Social Work, Hebrew University, Jerusalem, Israel.
Cooperating group(s): Israel Ministry of Social Welfare; Paul Baerwald School of Social Work, Hebrew University; Welfare Administration, U. S. Department of Health, Education, and Welfare.

HEALTH SERVICES

19-SA-1 CHILDREN'S HEALTH STUDY

Purpose: This is an extension of a special AFDC project of families on the welfare rolls of Texas State Department of Public Welfare.
Subjects: 280 children under 16 years of age residing in Houston and Harris county, Texas, whose parents are on the welfare rolls.
Methods: Medical history, physical examination, laboratory reports of a well group of children living under conditions of poverty, to determine prevalence and extent of acute and/or chronic health conditions. Physical examinations conducted by a team of doctors from Baylor University College of Medicine.
Duration: January 1965-unknown.
Investigator(s): Abbie C. Whidden, Executive Director, Visiting Nurses Association, 2616 S. Calumet, Houston, Tex. (Reported by Russell Lokkeberg, Research Director, Community Council, 215 Main St., Houston.)
Cooperating group(s): Baylor University College of Medicine; Community Council of Houston and Harris County; Texas State Department of Vocational Rehabilitation; Texas State Department of Public Welfare.

19-SA-2 PATTERNS OF HEALTH CARE AMONG LOW-INCOME FAMILIES

Purpose: (1) To describe actual health status and patterns of utilization of medical services as they existed at time of first contact with families in sample; (2) to introduce a change in health care by offering and delivering for three years a comprehensive pediatric care program to a randomly selected subsample; (3) to study acceptance and rejection as well as utilization of this program as to their forms, extent, and correlates, by families in subsample; and (4) after delivering this comprehensive program, to make a comparative analysis of its effects as observable in morbidity, utilization of services, health attitudes, and knowledge.
Subjects: About 900 low income Boston families.
Methods: Longitudinal survey research, using repeated interviews with mothers and collection of morbidity data from independent sources.
Duration: July 1962-June 1969.
Investigator(s): Joel J. Alpert, M.D., Instructor, and John Kosa, Ph.D., Research Associate, Family Health Care Program, Medical School, Harvard University, 83 Francis St., Boston, Mass. 02115.
Cooperating group(s): Commonwealth Fund; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Various articles and papers in preparation and in press.

19-SA-3 TEMPORAL INTERRELATIONSHIPS BETWEEN CLINICAL BACTERIOLOGICAL AND IMMUNOLOGICAL EVIDENCES OF INFECTION WITH GROUP A BETA HEMOLYTIC STREPTOCOCCI

Purpose: To determine time relationship between clinical, bacteriological, and immunological evidences of infection as a guide to potential of prevention of rheumatic fever; and to determine influence of socio-economic status

on relationships of the above nature.
Subjects: 604 children enrolled in a single elementary school in Dade County, Florida, were canvassed for permission to have them participate in project. 320 gave permission.
Methods: Monthly studies were carried out for routine throat culturing; blood samples were collected at beginning and end of school year. In addition, a surveillance was maintained on daily absence and additional blood and throat samples were collected on absentees. Also each family of the 604 children was visited by a field social worker to determine socio-economic status on basis of the Hollingshead criteria.
Findings: Average carrier rate of group A beta hemolytic streptococci was 14.8 percent almost identical with rate previously obtained in Miami area. In the presence of respiratory illness sufficient to cause absences, this rate rose to 15.7 percent. High socio-economic status (Classes I and II) reflected an average illness rate; Class III, a rate above expected; Class IV, significantly below; and Class V, average. Significantly lower respiratory illness rate was observed among school children living in crowded conditions.
Duration: September 1964-September 1965.
Investigator(s): Milton S. Saslaw, M.D., Director, Division of Research and Epidemiology, Dade County Department of Public Health, 1350 NW 14th St., Miami, Fla. 33125.
Cooperating group(s): Dade County Board of Public Instruction; Florida Heart Association; Wyeth Inc.; Norwich Chemical Co.; Heart Disease Control Program, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SA-4 HIRADO HEALTH SURVEY

Purpose: To ascertain: effect of consanguinity upon reproductive performance of a marriage; reproductive performance of the inbred individual; and certain characteristics of children born to parents, especially mothers, who are themselves products of consanguineous marriages.
Subjects: All children of middle-school age on Hirado (Nagasaki-ken, Japan), except for those attending middle school located in Hirado Machi itself; in all, some 1500 children were studied, as well as their parents. Reproductive performance was ascertained for all marriages where one or both spouses are still alive and residing on Hirado.
Methods: Methods involve physical examinations of children of middle-school age with particular emphasis upon hearing and vision. Similar tests modified somewhat to take into account age differences were conducted on parents. Individuals selected for study represent all children of middle-school age in a population of some 20,000 individuals. Fertility information was obtained from an island-wide census.
Duration: May 1964-September 1966.
Investigator(s): James V. Neel, M.D., and William J. Schull, Ph.D., Professors of Human Genetics, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Tokyo Dental and Medical University; Kyoto Prefectural University of Medicine; Kyushu University; Atomic Energy Commission.

19-SA-5 SOCIO-ECONOMIC CHARACTERISTICS RELATED TO HEALTH INDICES IN CHICAGO AND SUBURBAN COOK COUNTY, PART I: MATERNAL, INFANT, AND PRESCHOOL CHILD HEALTH SURVEY

Purpose: To survey problems in area of maternal, infant, and preschool child health to provide a factual base for future development and

strengthening of programs.
Methods: Organization and processing of available data to match geographic units of concern; classification of areas into socio-economic and health units.
Findings: Mortality rates vary according to economic status. There is a definite inverse relationship between infant mortality and income. The inverse relationship is not as clear for child and maternal mortality. Prematurity and illegitimacy rates are strikingly inverse in relationship to income. Racial differences are primarily economic differences.
Duration: May 1964-July 1966.
Investigator(s): Jean E. Bedger, M.A., Research Associate, Health Project, Welfare Council of Metropolitan Chicago, 123 W. Madison St., Chicago, Ill. 60602.
Cooperating group(s): Illinois State Department of Public Health; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Publication of Part I in September 1965.

19-SA-6 DEVELOPMENT OF A RESEARCH DESIGN TO EVALUATE THE EFFECTIVENESS OF A PEDIATRIC OUTPATIENT DEPARTMENT IN THE PROVISION OF MEDICAL CARE

Purpose: (1) To develop a research design to quantify services of an outpatient department; (2) to define and seek methods of measurement of community need and availability of services; (3) to find methods of evaluation of motivation of patients for follow-up care and to determine major obstacles in preventing continuity of care; (4) to determine necessary organization of facilities and specialized manpower for most effective use of time and space in providing largest amount of good service; (5) to assess existing knowledge in these areas and determine that which is applicable in improvement of patient care; and (6) to demonstrate that a systems approach to a complicated logistical problem with many variables will present a method of measurement and research of the effectiveness of clinical care facilities.
Investigator(s): Robert J. Meechan, M.D., Associate Professor of Pediatrics, Medical School, University of Oregon, 3181 SW Sam Jackson Park Rd., Portland, Oreg. 97201.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SA-7 DEVELOPMENT OF PLANS FOR A LONG-RANGE CHILD DEVELOPMENT AND MEDICAL CARE STUDY PROGRAM

Purpose: To prepare for a long-range, multidisciplinary, comprehensive, coordinated child development and health study and care program, in order to define, anticipate, prevent, detect promptly, and correct, when necessary, conditions which now appear to be resulting in development of essentially irreparable physical, intellectual, and/or psychological disabilities in a considerable proportion of American children.
Methods: Major physical, intellectual, and socio-psychologic component parts of the problem will be defined and then reassembled and integrated into whole units designed to fulfill overall needs of children and their families in an intelligently balanced manner.
Investigator(s): Nathan B. Talbot, M.D., Charles Wilder Professor of Pediatrics, Medical School, Harvard University, and Chief, Children's Service, Massachusetts General Hospital; M. Grace Hussey, M.D., Massachusetts State Department of Health; John P. Connelly, M.D., Chief, Ambulatory

Division, Children's Service, Massachusetts General Hospital, and Associate in Pediatrics, Medical School, Harvard University; and John Robinson, M.D., Clinical and Research Fellow, Massachusetts General Hospital, and Research Fellow, Medical School, Harvard University, Boston, Mass.

Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SD-1 VISION SCREENING AT THE INDIANA STATE FAIR

Purpose: To determine incidence of vision anomalies of all sorts at all ages.

Subjects: Children aged 5 to 20 constitute 75 percent of the traffic screened with a total of approximately 3,500 a year.

Methods: Keysort punch cards are used to analyze data. Booth is free; results are given to each person.

Findings: Surprising agreement with results of the California "Orinda Study."

Investigator(s): Merrill J. Allen, Ph.D., Professor of Optometry, Indiana University, Bloomington, Ind.

Cooperating group(s): Indiana Optometric Association.

19-SD-2 DEVELOPMENT OF A VISUAL MOTOR TEST FOR YOUNG CHILDREN

Purpose: To develop a test for evaluating deviations in visual motor functioning during the developmental process and at earlier levels than is possible with presently available tests.

Subjects: A diverse group of children: normal, retardates, brain-damaged, and psychotic.

Methods: Administration of test to 400 children, ages five to eight, and Stanford-Binet to half of the subjects. Test was also re-administered to 22 children who last year gave deviant errors; five are still doing so, and will be followed for at least another year. Data have also been gathered on 100 of contemplated total sample of 300 retardates and brain-damaged subjects in the course of their psychological evaluations. Fourteen residential centers throughout the country are cooperating in collection of data on psychotic children.

Duration: October 1963-continuing.

Investigator(s): Mary R. Haworth, Ph.D., Associate Professor of Medical Psychology and Senior Clinical Psychologist, Children's Service, Nebraska Psychiatric Institute, University of Nebraska College of Medicine, Omaha, Nebr. 68105.

19-SD-3 PROTEINURIA IN CHILDHOOD

Purpose: To determine prevalence and characteristics of proteinuria in school-aged children; to determine pathological characteristics of children who are spilling significant amounts of protein in their urine.

Subjects: 5,000 normal school-aged children between 5 and 16 years of age in a suburban area of Los Angeles.

Methods: Initial screening is done by means of a test tape. Children who are positive on screening have a 24-hour urine collection and analysis for protein. These children are then divided into persistent proteinuria,

orthostatic proteinuria, and intermittent proteinuria. Each of these experimental children is then matched with a control child. Experimental and control child each have a complete medical history and physical examination. Renal biopsies are being performed on a number of experimental group.
Findings: Roughly six percent of subjects show initial proteinuria on screening. Of these, approximately half are found to have persistent proteinuria. Of those with persistent proteinuria there is a family incidence beyond that which would be expected. Other results are pending.
Duration: September 1963-September 1967.
Investigator(s): Marsden G. Wagner, M.D., Assistant Professor of Pediatrics and Public Health; Fred G. Smith, Jr., M.D., Assistant Professor; and Neil N. Litman, M.D., Associate Clinical Professor, University of California, Los Angeles 24, Calif.
Cooperating group(s): National Institute of Arthritis and Metabolic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: No publications as yet. It is anticipated that initial publication will appear near the end of 1965 as a single article in a pediatric or medical journal; other single articles are expected to appear later.

19-SD-4 DETECTION OF METABOLIC AND OTHER INHERITED DISEASES IN CHILDREN

Purpose: To evaluate efficacy of screen tests in detecting metabolic and other diseases in a children's hospital population (both inpatient and outpatient) before development of complete clinical syndrome.
Methods: Screen tests which will be studied are those employing filter paper chromatography of blood and urine specimens which have been collected by absorption onto filter paper and stored in same state.
Investigator(s): Park S. Gerald, M.D., Assistant Professor of Pediatrics; Joseph L. Kennedy, Jr., M.D., Research Fellow in Pediatrics; and Francis X. Fellers, M.D., Assistant Professor of Pediatrics, Medical School, Harvard University, and Children's Hospital Medical Center, 300 Longwood Ave., Boston 15, Mass.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SG-1 STEREOPSIS THRESHOLD IN ELEMENTARY SCHOOL CHILDREN

Purpose: To determine prevalence of stereopsis and reasons for its failure to develop when absent.
Subjects: School children in elementary schools in southern Indiana.
Methods: Data are obtained during routine school vision screening tests carried out by the Division of Optometry.
Findings: Stereopsis appears to be all or none in nature. Gradations in stereopsis are usually caused by lack of refinement in correction of refractive error or by muscular imbalances of significant amount.
Duration: 1960-1965.
Investigator(s): H. W. Hofstetter, Ph.D., Director, Division of Optometry, Indiana University, Bloomington, Ind. (Reported by Merrill J. Allen, Ph.D., Professor of Optometry, Division of Optometry.)
Publication: Journal of the American Optometric Association 33:7:510-512, February 1962.

19-SG-2 CALIFORNIA JOINT STUDY OF STUDENT HEALTH PROBLEMS AND SCHOOL PERFORMANCE

Purpose: To explore relationships between health characteristics (or groups of them) and elements of school performance (or groups of them).
Subjects: Pupils from kindergarten, grades one, five, and nine.
Methods: Health examinations and evaluations of pupils and appraisal of school records evaluated by correlation matrices, factor analysis, analysis contingency tables and multiple regression analysis.
Duration: October 1963-unknown.
Investigator(s): B. Otis Cobb, M.D., Assistant Professor of Health Education, Stanford University, Palo Alto, and Director, California Joint Study of Student Health Problems and School Performance, 1933 Delaware St., Berkeley, Calif. 94709.
Cooperating group(s): Dairy Council of California.
Publication: Paper describing study read before 92nd Annual Joint Session of American Public Health Association and American School Health Association.

19-SG-3 A DEMONSTRATION AND RESEARCH PROGRAM IN HEALTH NEEDS AND HEALTH CARE OF CHILDREN IN DAY CARE

Purpose: To determine what health problems are related to or influenced by group care, and what program of health supervision can provide optimal health care with most efficient utilization of health personnel.
Subjects: Children from infancy through elementary school age enrolled in a child development center being organized at the University of North Carolina, and a control group of children in the community.
Methods: Subjects will be given comprehensive health care. Control groups will be given limited health care, and will allow for some control of variables in various studies to be undertaken.
Investigator(s): Sidney S. Chipman, M.D., Professor, and Ann DeHuff Peters, M.D., Associate Professor, Department of Maternal and Child Health, University of North Carolina, Chapel Hill, N. C. 27515.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SJ-1 STUDY TO DETERMINE APPLICATION OF DENTAL CARIES ACTIVITY TESTS IN ESTABLISHING PRIORITIES FOR PREVENTIVE DENTAL PROGRAMS

Purpose: To determine feasibility of using caries activity tests in establishing priorities of effort in conducting topical fluoride programs. It is anticipated that those children with high dental caries activity and minimal dental damage will receive high priority in a topical fluoride program. Those with high caries activity and extensive damage would receive a lower priority for preventive programs but a high priority for treatment programs.
Subjects: 1,000 school children.
Methods: Saliva samples obtained from subjects; individual caries activity and susceptibility determined by use of caries activity tests. Using a simplified dental survey technique such as screening by tongue blades, extent of previous dental damage is determined. By comparing dental caries activity and susceptibility with past dental damage, priorities for preventive programs and treatment programs are established.
Duration: Summer 1963-unknown.
Investigator(s): Robert Q. Ingraham, D.D.S., Dental Officer; Lucile B. Jarratt, M.P.H., Dental Hygiene Consultant; and Kent T. Roark, B.S., Associate Laboratory Director, Tennessee State Department of Public Health,

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Cordell Hull Building, Nashville, Tenn. (Reported by A. H. Trithart, D.D.S., M.P.H., Director, Division of Dental Health, Tennessee State Department of Public Health.)

Cooperating group(s): Decatur County Health Department; Decatur County Department of Education; Tennessee Department of Public Health.

19-SJ-2 EFFECT OF TOPICALLY APPLIED ACIDULATED PHOSPHATE-FLUORIDE ON DENTAL CARIES EXPERIENCE

Purpose: To determine efficacy of an acidulated phosphate-fluoride solution in controlling dental caries when applied topically to teeth of school children.

Subjects: Approximately 1,200 school children in the State of Hawaii, enrolled in grades five and six.

Methods: Children were divided into four comparable study groups. Group A annually receives a prophylaxis; Group B annually receives a prophylaxis followed by a topical application of a phosphate-fluoride solution; Group C receives semiannually the same treatment prescribed for Group B; and Group D receives annually a prophylaxis followed by a topical application of a phosphate-fluoride gel. Clinical dental examinations are conducted annually. Dental caries increment for each group is tabulated and evaluated statistically.

Duration: February 1965-February 1968.

Investigator(s): Herschel S. Horowitz, D.D.S., M.P.H., Chief, Research and Development Section, Disease Control Branch, Division of Dental Public Health and Resources, Public Health Service, U. S. Department of Health, Education, and Welfare, 8120 Woodmont Ave., Bethesda, Md.

Cooperating group(s): Hawaii State Department of Health.

Publication: Paper will be submitted for publication in appropriate professional journal and may be presented at a national dental meeting.

19-SM-1 THE EFFECTS OF AIFR (AMERICAN INSTITUTE OF FAMILY RELATIONS) PROGRAM OF EDUCATION FOR EXPECTANT PARENTS

Purpose: To determine quality of offspring, i.e., vigor, absence of defects, and postnatal health of infant; to study labor and delivery, i.e., complications, duration, subjective reactions, blood loss, medication required, etc.; and to study quality of pregnancy and recovery.

Subjects: Expectant parents and their offspring; three experimental groups and one control.

Methods: Experimental group A was given complete program; Group B was given Mothercraft and Childbirth Training only; and Group C was given all except nutrition training. Controls were paired by age, parity, education and socio-economic level.

Duration: Not reported-June 1966.

Investigator(s): Mary Jane Hungerford, Ph.D., Director, Department of Education, American Institute of Family Relations, 5287 Sunset Blvd., Los Angeles 27, Calif.

Publication: Will be submitted to appropriate journals.

19-SM-2 PROGRAMMING FOR SOCIAL RESEARCH IN MATERNAL AND CHILD HEALTH

Purpose: To follow up children with chronic illness and handicaps who have

had intensive medical and ancillary services provided by specialists, special programs, and facilities such as hospitals and rehabilitation centers and then have been returned to their home communities where primary responsibility for continuing medical and social care rests with professionals and agencies in the local community. Main objectives are: to describe experience of patients, families, and agencies during period subsequent to treatment at special facilities; to examine extent to which medical and social recommendations made at time patients were discharged from special facilities were followed; to identify those factors which promote and those which deter follow-up by patients and families of medical and social recommendations which were made; and to assess present methods of offering services to these children in relation to first three objectives.
Investigator(s): William T. Hall, Ph.D.; Daniel E. O'Keefe, Ph.D., Division of Clinical Social Work, School of Medicine, Stanford University, 300 Pasteur Dr., Palo Alto, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-3 PREDICTION AND IMPROVEMENT OF POSTPARTUM ADJUSTMENT

Purpose: To replicate prediction of short-term postpartum adjustment; to investigate longer term outcome of early (first week) postpartum adjustment by taking measures at six weeks following delivery; and to determine effect of experimental intervention upon subsequent postpartum adjustment.
Subjects: Primigravid women and their husbands enrolled in a military hospital prenatal clinic and followed to six week postpartum clinic.
Methods: Experimental group would be given supportive perinatal care (group discussions, individual services, and community agency assistance). Their postpartum adjustment at six weeks and one week would be compared with that of a similar control group which received no such support. Observation and interview data obtained by home visits in first and sixth postpartum weeks would be used as part of criterion for postpartum adjustment.
Investigator(s): Virginia L. Larsen, M.D.; James Elliot, M.A.; and John B. Marks, Ph.D., Mental Health Research Institute, Post Office Box 907, Fort Steilacoom, 98332; Major Jack Pearson, AMC, and Colonel Woodrow Pickhardt, AMC, Obstetric Department, Madigan General Hospital, Tacoma, Wash.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-4 SIGNIFICANCE OF VARIATIONS IN INFANT MORTALITY WITHIN MINNESOTA

Purpose: To develop a background of information which will assist in understanding problems related to infant and neonatal mortality within the State. This information will serve as basis for planning additional research studies, as well as for planning service and educational programs.
Methods: In order to measure trends in infant and neonatal mortality among the counties, cities, and regions of Minnesota, various data on births, infant deaths, and neonatal deaths for a 15-year period (1950-1964) will be analyzed. These data will be studied in an effort to account for observed differences within the State, by considering various biomedical and socioeconomic factors, such as birthweight, color or race, education, and availability of medical and hospital facilities.
Investigator(s): Abraham B. Rosenfield, M.D., M.P.H., Director, Division of Special Services and Acting Chief, Section of Maternal and Child Health; Robert W. Hiller, M.S., Chief, Section of Vital Statistics, Minnesota State Department of Health; and J. E. Bearman, Ph.D., Department of Biostatistics,

University of Minnesota, University Campus, Minneapolis, Minn. 55440. Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-5 INFLUENCE OF SEASON OF CONCEPTION ON OBSTETRIC PROBLEMS AND CASUALTIES

Methods: Establish cohorts using initial date of last menstrual period as convenient estimate of when conception occurred. Seasonal pattern of conceptions can thus be determined, as well as variations in early, intermediate, and late fetal loss, infant or perinatal mortality, occurrence of complications of pregnancy, birthweight, duration of gestation, congenital malformations, etc. Consideration will also be given to differential effect, if any, of ethnic group, plurality, sex (of single-born infants), parity, and age of mother.
Investigator(s): Carl L. Erhardt, Sc.D., Director of Statistics; Jean Pakter, M.D., Chief, Maternity and Newborn Division; and Frieda G. Nelson, B.A., Senior Statistician, Bureau of Records and Statistics, New York City Department of Health, 125 Worth St., New York, N. Y. 10013.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-6 DETERMINATION OF MAJOR MATERNAL COMPLICATIONS OF PREGNANCY IN ACCORDANCE WITH CERTAIN SOCIO-ECONOMIC CATEGORIES

Purpose: To determine 10 most frequently occurring maternal complications of pregnancy.
Subjects: 215,000 patients contained in 1963 computer magnetic tape file of the Perinatal Study of the Foundation for Medical Research.
Methods: Data will be analyzed to find 10 most frequently occurring maternal complications of pregnancy. These will then be subdivided into certain subcategories representing gross socio-economic groupings. Perinatal mortality for each maternal complication and socio-economic grouping will be determined and further subdivided into groups for infants of weights above and below 2500 grams. A determination of perinatal mortality rates will be made for each socio-economic category, as well as for whole group. Analysis will be made of research material to see if there are any gross differences in medical complications and if there is any relationship to patient's socio-economic status.
Investigator(s): Sydney H. Kane, M.D., Executive Director, Foundation for Medical Research, 4840 Frankford Ave., Philadelphia, Pa. 19124.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-7 BARRIERS TO MATERNAL AND INFANT CARE IN NEW HAVEN

Purpose: To identify reasons why available health care facilities for pregnant women and children are not being utilized in some tracts in New Haven where infant mortality rates are high; and to learn relative contribution of each of a variety of barriers to care: social, cultural, economic, and linguistic.
Methods: A plan for improvement in health care and increased efficiency in provision of services might include utilization of nurse midwifery students or close association of prenatal, family planning, and child care facilities.

Initially, an individual trained in social science will develop a program with support of existing staff and aid of graduate students.
Investigator(s): Ira W. Gabrielson, M.D., Assistant Professor of Public Health and Pediatrics; Lowell S. Levin, Ed.D., Associate Professor of Public Health (Health Education); C. Lee Buxton, M.D., Professor of Obstetrics and Gynecology; Florence S. Wald, M.S., Dean, School of Nursing; and Paul S. Anderson, Ph.D., Associate Professor of Biostatistics; Department of Epidemiology and Public Health, School of Medicine, Yale University, New Haven, Conn. 06510.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-8 DEVELOPMENT OF NEW APPROACHES TO PROGRAMMATIC ACTIVITIES IN MATERNAL AND CHILD HEALTH

Purpose: To seek new ways of developing programmatic activities in the field of maternal and child health.
Methods: Such areas as high rate of infant mortality in the Negro and Puerto Rican, errors of inborn metabolism, school health, development of a special program for high risk mothers, and drug addiction and the outcome of pregnancy will be considered.
Investigator(s): Paul M. Densen, Sc.D., Deputy Commissioner for Research and Program Planning, and Harold Jacobziner, M.D., (deceased), formerly Assistant Commissioner for Maternal and Child Health, New York City Department of Health, New York, N. Y.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SM-9 MATERNITY CARE RESEARCH UNIT

Purpose: To describe operation of a maternity care research unit established in the outpatient department of a large, urban maternity hospital; and to describe operation of clinic, its personnel and policies, as well as those characteristics of patients which are associated with utilization of clinic services.
Methods: Analyses will be made, specifically, of social and motivational factors influencing acceptance of maternity care among a low income population. Relationship between these factors and medical care needs of women will constitute basis for formulation of specific hypotheses regarding changes required to improve maternity care. Programs will be designed and initiated to promote utilization of clinic services and to achieve more effective methods for providing care. Major emphasis will be placed on studying process of organizational change, including activities of clinic's professional and technical personnel and financial base on which services are built.
Investigator(s): Donald A. Cornely, M.D., Associate Professor of Maternal and Child Health, Graduate School of Public Health; Donald L. Hutchinson, M.D., Professor and Chairman, Department of Obstetrics and Gynecology, School of Medicine; and Jack L. Fairweather, M.D., Assistant Professor of Obstetrics and Gynecology, School of Medicine, University of Pittsburgh, Pittsburgh, Pa. 15213.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SN-1 COMMUNITY AND PERSONAL FACTORS IN ADOPTION AND NONADOPTION OF FAMILY PLANNING SERVICES: DEVELOPMENTAL RESEARCH

Purpose: To conduct studies of factors which influence adoption and nonadoption of family planning by low income families who have been exposed to programs of information-motivation; to study forces that promote adoption and those that impede it from both a sociological and a psychological point of view--conditions in the community and psychological processes of the individual.
Methods: Populations that have been exposed to a sustained program of information-motivation will be studied, using both conventional interviewer methods and methods of clinical psychology.
Investigator(s): Donald J. Bogue, Ph.D., Professor of Sociology, University of Chicago; Paul Williams; Keshav Dev Sharma; and John Laing, Senior Research Assistants, Community and Family Study Center, 1411 E. 60th St., Chicago, Ill. 60637.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SP-1 ACCIDENTAL POISONING IN CHILDHOOD - A PSYCHOSOCIAL STUDY

Purpose: To establish true prevalence of accidental poisoning in preschool children; to discover and account for any differences in characteristics of reporting and nonreporting families, families of single ingestures or poison repeaters, and matched controls; and to examine current preventive measures in light of this information.
Subjects: A random sample of 1,500 families derived from an initial universe of 4,000 in a rural, New England community.
Methods: Each family of a preschool child will be investigated through a home visit, standardized interview, poisoning-health-accident questionnaire, poison hazard survey, and child's poison recognition and discrimination test. A second home visit will be made 18 months after initial home study and a repeat of these methods will be carried out. Data will be analyzed according to standard, statistical methods.
Duration: June 1965-May 1969.
Investigator(s): Raymond Sobel, M.D., Professor of Psychiatry, Dartmouth Medical School, Hanover, N. H.
Cooperating group(s): Division of Accident Prevention and Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Pediatrics* 35:641-651, 1965.

19-SP-2 A PEDIATRIC CARDIAC PROGRAM SERVING THE STATE OF CONNECTICUT

Purpose: Organization and service to Connecticut children who have cardiac disabilities.
Subjects: Children from birth to age 21 with cardiac problems.
Methods: A demonstration pediatric cardiac program which ran from 1947 to 1960 and subsequently was taken over by Yale Medical Center, served all patients with murmurs referred from entire State, without professional charge. Team included medical social worker, public health nurse, pediatricians, and pediatric cardiologists. Reports were sent to all referring physicians and agencies. Cardiac catheterization and surgery were available for those who required it. Data on each patient have been coded and analyzed. Certain family and nursing studies have been done.
Findings: Five-thousand patients were seen; 39 percent had innocent murmurs, 13 percent had rheumatic fever or rheumatic heart disease, and

44 percent had congenital heart disease.
Duration: 1947-1966.
Investigator(s): Ruth Whittemore, M.D., Associate Clinical Professor of Pediatrics, School of Medicine, Yale University, and Senior Physician, Connecticut State Department of Health, 333 Cedar St., New Haven, Conn.
Cooperating group(s): Connecticut Heart Association; Yale University School of Medicine; New Haven Department of Health; Connecticut State Department of Health; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: A monograph is in the process. Certain individual papers will appear in medical literature.

19-SP-3 CHILDHOOD ACCIDENT STUDY

Purpose: Study of child, family, and environmental circumstances of accident injury in preschool children suffering accidents requiring hospitalization is planned to include selected information on injury severity, family life at time of accident, child characteristics, and family health and safety subsystems of belief and practices.
Subjects: All children resident in Chittenden County, Vermont who are admitted during a 12-month period to one of the hospital services for an accidental injury occurring during that period, and a probability sample of children in the same county area.
Methods: Hospital observation, home visiting, and structured interviews.
Duration: August 1963-1966.
Investigator(s): John H. Mabry, Ph.D., Associate Professor, and Roger J. Meyer, M.D., Assistant Professor of Epidemiology and Community Medicine, College of Medicine, University of Vermont, Burlington, Vt.

19-SP-1 EVALUATION OF THE RESOURCES OF A PEDIATRIC OUTPATIENT PROGRAM

Purpose: To explore in depth social problems and consequent needs of patients presenting themselves for treatment in the pediatric outpatient department; and thereafter to study better methods of providing quality medical care and optimal utilization of other community resources to meet steadily increasing demand for outpatient services. This includes utilization of para-medical personnel and physicians at various levels of training.
Subjects: A large random sample of patients presenting themselves for care in the Pediatric Outpatient Department of the Los Angeles County General Hospital, approximately 2,500 to 3,000 patients per month, for a period of two months.
Methods: College and medical students interview a random sample of patients presenting themselves for care over a 24-hour period daily. Questions include following: age, sex, ethnic background, geographical residence, place of birth, marital status of family, initial reference, mode of transportation to clinic, availability of regular family doctor, or other source of medical advice; utilization of public health clinics, financial status of family, reason for coming at a specific hour, availability of telephone, type and severity of illness as viewed by parent and examining doctor, services utilized in the Los Angeles County General Hospital outpatient department, and disposition of patient. Data will be analyzed by machine tabulation.
Duration: June 1965-unknown.
Investigator(s): Willis A. Wingert, M.D., Assistant Professor of Pediatrics, University of Southern California, and Director, Pediatric

Outpatient Department; and David B. Friedman, M.D., Assistant Director, Pediatric Outpatient Department, Los Angeles County General Hospital, Los Angeles, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SP-5 EXPLORATION OF PARENTAL UTILIZATION OF NURSING SERVICES FOR CHILDREN

Purpose: To discern socio-psychological and environmental factors affecting parents and health service personnel as they are associated with differential patterns of health service and health service utilization.
Subjects: Parents whose two-year old children are currently registered in child health stations and those whose registrations have been terminated.
Methods: Development of various instruments: record review abstracts; home and station interview schedules for parents; observation guides; and questionnaires for health personnel, which are used to describe the following: health service utilization behavior of parents over a period of time; manner in which parents define health and illness and activities associated with these definitions; climate of opinion about parental behavior among health service personnel; and social behavior of parents and health personnel in selected child health stations.
Duration: July 1964-August 1966.
Investigator(s): Helen M. Simon, R.N., M.A., Director, Nursing Research, Bureau of Public Health Nursing, New York City Department of Health, 40 Worth St., New York, N. Y. 10013.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SP-6 STUDY OF OUTPATIENTS AT MONTREAL CHILDREN'S HOSPITAL

Purpose: To provide Montreal Children's Hospital with information relevant to planning necessary anticipated expansion in the outpatient department; and to discover why parents use outpatient services for their sick children and why they select this particular outpatient department.
Methods: Collection of following information about families using the outpatient department: socio-economic characteristics; judgments of illnesses requiring treatment; channels and pathways leading them to this particular clinic; other medical services they use; their location in the metropolitan area; and their feelings regarding their experiences in clinic.
Duration: June 1963-April 1967.
Investigator(s): Alan Ross, M.D., C.M., F.R.C.P. (Canada), Physician-in-Chief, Montreal Children's Hospital, 2300 Tupper St., Montreal 25, Que.
Cooperating group(s): Department of Sociology and Anthropology, McGill University; Department of National Health and Welfare of Canada.

19-SP-7 A STUDY OF METHODS FOR PEDIATRIC EDUCATION RELEVANT TO COMMUNITY NEEDS AND AGENCY CHILD HEALTH PROGRAMS

Purpose: To define health needs in a community adjacent to a teaching hospital; to determine how these needs are modified by economic, medical, cultural, educational, and ethnic determinants; and to explore how these needs are met by local pediatric care and welfare and/or health agency programs.

Methods: After problem is defined, study will consist of orientation of medical students, house officers-in-training, and pediatricians toward an active role in child-centered community health programs, and improvement of interdisciplinary cooperation between a department of pediatrics in a medical school-teaching hospital and practicing pediatricians, educational, welfare, social work, and health agencies.
Investigator(s): Jack Metcoff, M.D., Professor and Chairman, Department of Pediatrics, Chicago Medical School, and Chairman, Division of Pediatrics, Michael Reese Hospital and Medical Center, 29th and Ellis Ave., Chicago, Ill. 60616.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

19-SS-1 FURTHER ANALYSIS OF FOLLOW-UP STUDY DATA

Purpose: To determine which, if any, antecedent clinical variables predict status of clinic patients one to 10 years after the end of the clinic contact. Original data were collected by Dr. Eugene Levitt in 1956.
Subjects: 469 former child guidance clinic patients ranging in age from 11 to 29 years with a mean age of 15.87 years at time of follow-up. Mean follow-up interval was 5.39 years.
Methods: A symptom change score between intake and follow-up interview is being computed for each case. Then mean change scores will be compared for subgroups formed on basis of various antecedent clinical variables such as quality of mother-child relationship at time of initial clinic contact, child's diagnosis, etc.
Duration: February 1962-not reported.
Investigator(s): Elise E. Lessing, Ph.D., Assistant Director of Research, and Kenneth I. Howard, Ph.D., Chief, Division of Measurement and Evaluation, Institute for Juvenile Research, 907 S. Wolcott St., Chicago 12, Ill. (Reported by Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research.)

19-SS-2 DROP-IN GROUP GUIDANCE

Purpose: To evaluate possibility of immediately-available group counseling and guidance being used as both preventive and short-term therapeutic intervention.
Subjects: All patients applying to San Fernando Valley Child Guidance Clinic and satellite offices.
Methods: Brief individual and group screening and immediate group counseling (where indicated) for all subjects and their parents. Prompt referral for more definitive services or to other agencies is also offered.
Duration: February 1965-January 1970.
Investigator(s): I. Hyman Weiland, M.D., Director, San Fernando Valley Child Guidance Clinic, 14852 Ventura Blvd., Sherman Oaks, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Initial report submitted for presentation at 1966 meeting of American Orthopsychiatric Association.

19-SS-3 CRISIS INTERVENTION IN PRE- AND EARLY SCHOOL YEARS

Purpose: To identify variables within child, home, school, and community related to child's ability to successfully adapt to and cope with stress of school entry and early school years; and to explore various methods of intervention by mental health personnel designed to help child, home, school, and community to decrease stress and increase adaptive skills.
Methods: Four teams of psychiatrists, pediatricians, psychologists, and psychiatric social workers will do intensive preschool screening on a selected group of entering first graders, make prognostic judgments concerning their ability to adapt to school situation, and offer brief counseling to parents to help children meet this crisis. A full-time school psychologist will consult with teachers concerning these children and follow their adjustment during the first four grades.
Duration: January 1963-January 1968.
Investigator(s): Carl A. Bramlette, Jr., Ph.D., Coordinator, Mental Health Education; Merle Robert Newton, Community Psychologist, Sumter County Mental Health Project; Charles D. Whatley, Jr., Ph.D., Research Consultant; Elsye McKeown, Mental Health Consultant in Psychiatric Social Work, South Carolina Mental Health Commission, 2214 Bull St., Columbia; and R. Ramsey Mellette, Jr., M.D., Director, Charleston County Mental Health Clinic, 275 Calhoun St., Charleston, S. C. (Reported by Racine D. Brown, South Carolina State Department of Mental Health.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SS-4 PROBLEM PREVENTION IN THE PRIMARY GRADES

Purpose: To evaluate effects of coordinated psychiatric approaches in working with very young children in kindergarten, and first and second grades of selected public schools in New York City; to determine most effective ways of providing these children with the particular type of help they need at this stage of their development; and to determine whether such help provided at this time will prevent development of more serious problems and more severe difficulties at later stages in their lives.
Methods: Core of program includes attempts at group therapy with children, discussion groups with their parents, and seminars and workshops with their teachers. A special aspect involves selection of those children who also have younger siblings who have not yet entered school. It will therefore be possible to attempt to evaluate effects of this program on future adjustment of preschool siblings when they enter school as well as to follow up their older siblings in higher grades. Attempts will be made to evaluate various techniques for reaching and providing effective casework, psychiatric, and psychological help for these children and particularly their parents. There will also be a longitudinal follow-up of at least five years of those children who receive therapy (experimental group), an equivalent group of children with similar behavior problems who did not receive therapy (control group), and a group of children who were not referred by their teachers as showing any behavior problems in primary grades.
Duration: Not reported-December 1966.
Investigator(s): Kenneth B. Clark, Ph.D., and Paul K. Benedict, M.D., Ph.D., Northside Center for Child Development, Inc., 31 W. 110th St., New York 26, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SS-5 CONSULTATION FOR PSYCHOLOGICAL PROBLEMS IN CHILDREN

Purpose: To explore systematically some specific ways in which problems in current interpersonal communication contribute to behavior disorders in this population; to develop and test effectiveness and economy of intervention methods designed to help resolve communication difficulties through changes in child's physical and interpersonal environment at home and at school, without direct intervention into either child's or relevant adult's intrapsychic problems; and to examine whether this approach provides a basis for specialized mental health consultation to schools, which can serve as part of a community mental health program.

Subjects: Grade school children with both chronic learning difficulties and more general behavior problems.

Methods: Findings will be evaluated through systematic following of all cases over a period of two years with uniform measures, and by comparing demonstration group results with those of several control groups.

Investigator(s): J. W. Kaswan, Ph.D.; L. R. Love, Ph.D.; and E. H. Rodnick, Ph.D., Department of Psychology, University of California at Los Angeles, Los Angeles 24, Calif.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SS-6 PILOT PROJECT ON HOME MANAGEMENT OF FAMILY CRISES

Purpose: To analyze in detail the family as a social system, and to ascertain ways of altering significant facets of family functioning.

Subjects: Total families present having a child with distrubed behavior.

Methods: Visiting in home by a highly trained psychiatric nurse, averaging 50 hours of observation.

Duration: April 1963-June 1965.

Investigator(s): Frank T. Rafferty, M.D., Associate Professor in Psychiatry, and Director of Child Psychiatry; Sally Miller McClure, M.A., and Blanche Ingraham, M.A., Research Assistants, Medical School, University of Maryland, 645 W. Redwood St., Baltimore, Md. 21201.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Manuscript presented at American Orthopsychiatric Association meeting.

19-SS-7 EARLY DETECTION AND PREVENTION OF EMOTIONAL PROBLEMS

Purpose: To develop and test new approaches and procedures for a community mental health program; more specifically, to develop community field programs in school setting oriented toward prevention of emotional disturbance in young (primary grade) children; to develop assessment procedures to detect pathology or incipient pathology at earliest possible time and to explore techniques of immediate secondary prevention with such cases; to develop and modify subprofessional and professional training programs as a means of increasing number of both supervisory and field workers; and to conduct continuing research evaluating effectiveness of prevention program, of many of its separate subcomponents, of subprofessional training programs and people whom they attract, and of changes introduced in professional level training programs.

Duration: September 1964-September 1969.

Investigator(s): Emory L. Cowen, Ph.D., Professor of Psychology; Melvin Zax, Ph.D., Associate Professor of Psychology, University of Rochester;

Louis D. Izzo, Psychologist; and Mary Ann Trost, Social Worker, Rochester City School District, Rochester, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

19-SS-8 MOTHERS AS COLLEAGUES IN SCHOOL MENTAL HEALTH WORK

Purpose: To develop and evaluate effectiveness of a program of primary prevention of emotional illnesses in school children; and to learn more about salient dimensions of mental health in young children.
Subjects: Approximately 200 children entering kindergarten in 1965 and 1966, in three elementary schools of a St. Louis County school district.
Methods: Use of Campbell and Stanley's Recurrent Institutional Cycle Design to evaluate effects of preventive program in experimental classrooms, by comparing change measures of children in those rooms with similar measures of children in control classrooms. Two mental health professionals observe and rate children three times a year in each school. In experimental classrooms, a mental health professional conducts research interviews with volunteering mothers, offers casework service at their request, and gives ongoing consultation to teachers and principal.
Findings: In a trial run of preventive program in 1964-65, 76 percent of invited mothers volunteered for research interviews, and 36 percent of those subsequently requested additional casework help. Except in one case, additional help was sought for an older child in family, rather than for subject of research interview. Thus, mothers act as casefinders.
Duration: September 1965-August 1969.
Investigator(s): Lorene A. Stringer, M.S.W., Community Mental Health Coordinator, and John C. Glidewell, Ph.D., Director, Division of Research and Development, St. Louis County Health Department, 801 S. Brentwood Blvd., Clayton, Mo. 63105.
Cooperating group(s): School District of Ladue, St. Louis County; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Yearly progress reports available from St. Louis County Health Department. Limited supply of project proposal, as submitted to National Institute of Mental Health, is available now.

19-SS-9 A FOLLOW-UP SURVEY OF THE EFFECTIVENESS OF A PROVINCIAL CHILD GUIDANCE CLINIC IN RURAL COMMUNITIES

Purpose: To assess various kinds of services that can be offered by guidance clinics to rural children, kinds of children that are referred to these clinics, community attitudes towards them, and follow-up information on their effect.
Subjects: 780 children seen for diagnostic consultation by Edmonton Guidance Clinic. This includes 150 city children who served as matched controls.
Methods: Three kinds of rural diagnostic services are being evaluated by follow-up techniques: rural children who are brought to the city; rural children who are seen in regularly scheduled travelling clinics to large rural centers; and children who are seen in their own community where clinic team comes to their community on an unscheduled basis as required.
Findings: Tentative results suggest important differences in effectiveness of consultations for city children and rural children, but these differences are not particularly a function of the kind of rural area serviced nor the extent of intensity of service provided by the clinic to that area.

Duration: April 1964-September 1965.
Investigator(s): A. Ralph Schrag, M.D., Child Guidance Clinic, Provincial Department of Public Health, Edmonton; and P. O. Davidson, Ph.D., Assistant Professor of Psychology, University of Alberta, Calgary, Alta.
Cooperating group(s): Department of National Health and Welfare of Canada.
Publication: Publications submitted to Journal of Child Psychology and Psychiatry and American Journal of Orthopsychiatry. Major results planned for publication in Canada's Mental Health.

ORGANIZATIONS

ALABAMA

- University of Alabama 19-PD-4, 19-PD-5
  - Psychology 19-IG-3

ARIZONA

- Arizona State University
  - Counseling and Educational Psychology 19-CP-3
- University of Arizona
  - Psychology 19-CP-7

ARKANSAS

- Harding College 19-BD-1

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CURRENT EMPHASES IN DELINQUENCY GRANTS PROGRAM

With the establishment of the Office of Economic Opportunity in 1964, the focus of the grants program of the Office of Juvenile Delinquency and Youth Development (Welfare Administration, U. S. Department of Health, Education, and Welfare) has shifted from comprehensive demonstration projects dealing with the community setting to short-term projects involving selected groups of delinquent and potentially delinquent youth in settings other than deprived inner-city areas. Current projects emphasize group work and special education techniques with potential delinquents and dropouts, therapeutic measures for glue-sniffers and drug users, use of volunteers in action programs, training of neighborhood men to provide an identification model for fatherless boys, half-way houses, job opportunities, the rewarding of socially acceptable behavior by inmates of a training school, and rehabilitation methods utilizing alternatives to institutionalization.

NEW ABSTRACTING SERVICE FOR POVERTY INFORMATION

The Research Division of the Institute of Labor and Industrial Relations (University of Michigan and Wayne State University) has begun publication of Poverty and Human Resources Abstracts, a bimonthly reference work which includes detailed abstracts, shorter annotations, bibliographic references, a review article, and a section on national and state legislative developments in this rapidly growing field of study. Information sources include over 300 U. S. and Canadian journals, publications of governmental and private agencies, and relevant information referred by a National Information Referral Committee. Information is available from the Institute, P.O. Box 1567, The University of Michigan, Ann Arbor, Michigan 48106.

NEW DEVELOPMENTS IN GRANTS PROGRAM OF CHILDREN'S BUREAU

Under a grant from the Children's Bureau, a Clinical Research and Training Center in Child Welfare has been established at the School of Social Service Administration, University of Chicago. Plans are to incorporate a research orientation and current research findings into the early professional training of child welfare workers. Thus, objective evidence will be obtained on successful or unsuccessful methods. In addition, students will benefit from direct exposure to the problems of the client. Although this program is now in its early stages, the Children's Bureau hopes that additional centers can later be established at appropriate universities.

Another proposal, still in the planning stages, would make funds available for individual dissertation studies in child welfare. The grants would be made through universities and would encourage the undertaking of studies, limited in scope, which would reflect the ideas of a new generation of professionals. The requirements and procedures for this program are currently being developed.

REVISED MENTAL RETARDATION AND ABUSED CHILD LISTINGS

Research Relating to Mentally Retarded Children, first published by the Children's Bureau Clearinghouse in 1960, is now available in revised form. It includes 858 studies reported to the Clearinghouse through 1965, and may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. The price is 65 cents. Free copies of the "Bibliography on the Battered Child" are also available in revised form from the Clearinghouse, Children's Bureau, Washington, D. C. 20201.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. (Gives synopses of U. S. doctoral dissertations with an annual index.)
dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington 2, D. C.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y.
Inventory of Social and Economic Research in Health, Health Information Foundation, 420 Lexington Ave., New York 17, N. Y.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York 17, N. Y.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington 6, D. C.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York 3, N. Y.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York 24, N. Y.

The Excerpta Medica Foundation, New York Academy of Medicine Bldg., 2 E. 103rd St., New York 29, N. Y., has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, Excerpta Medica can provide to subscribers, at cost, photocopies and translations of complete articles.

The Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Science Information Exchange, Smithsonian Institution, 209 Madison National Bank Bldg., 1730 M St., N. W., Washington, D. C. 20036, provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name____

Address____

____

Name____

Address____

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Name____

Address____

____

Name____

Address____

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Signed____________________

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CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D. C. 20201

If you or your colleagues are currently engaged in research on children or their families, we would greatly appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to provide research investigators with information about other research in progress, to point up gaps in present research, and thereby to stimulate more effective research.

The instructions on the third page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

____

Thank you for your cooperation.

INFORMATION SUPPLIED BY

Name ______________________________

Position ______________________________

Organization and address ____________________

____

____

SUMMARY OF RESEARCH PROJECT

Title:

Purpose:

Subjects (sample):

Methods:

Findings to date, if any:

Date project initiated: Estimated terminal date:

Principal investigator(s) only Degree Position and organization

Cooperating groups (in the research or in the funding of the research):

Publication references and/or plans (If no publication is planned, please indicate under what conditions data and results will be available):

If this represents work toward an academic degree, please state degree ________________________.
(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry.)

INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research with children in order to keep investigators informed of the work of other investigators, to point up gaps in present research, and hopefully to stimulate more effective research programs.

Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. Additional free copies of each issue are sent to directors of research programs and to libraries. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Clearinghouse maintains a mailing list of persons to be notified whenever a new issue is published, usually twice a year.

The Children's Bureau Clearinghouse routinely exchanges information with other clearinghouses in related fields such as the National Research and Information Center on Crime and Delinquency of the National Council on Crime and Delinquency, and the U.S. Public Health Service Clearinghouse on Current Morbidity Statistics Projects. The Science Information Exchange is very helpful in providing abstracts of research supported by federal funds and by large foundations.

The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
WELFARE ADMINISTRATION

Children's Bureau **Washington, D.C. 20201**

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RESEARCH RELATING TO CHILDREN

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Bulletin 3 (December 1955-April 1956)
Bulletin 5 (October 1956-February 1957)
Bulletin 6 (March-July 1957)
Bulletin 7 (August 1957-February 1958)
Bulletin 8 (March-July 1958)
Bulletin 10 (March-July 1959)
Bulletin 11 (August 1959-February 1960)
Bulletin 12 (February-July 1960)
Bulletin 13 (August 1960-January 1961)
Bulletin 14 (February-September 1961)
Bulletin 15 (October 1961-June 1962)
Bulletin 16 (July 1962-January 1963)

An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. Additional free copies are available to directors of research centers and to libraries upon direct request to the Clearinghouse, Children's Bureau, Washington, D. C. 20201.

The Clearinghouse will be happy to add anyone to the mailing list to be notified whenever a new issue is published.

bulletin no. 20

RESEARCH relating to CHILDREN

U. S. DEPARTMENT
of HEALTH,
EDUCATION,
and WELFARE

WELFARE ADMINISTRATION

Children's Bureau
1967

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CHILDREN'S BUREAU - Katherine B. Oettinger, Chief
Division of Research - Charles P. Gershenson, Director
Child Life Studies Branch - Elizabeth Herzog, Chief

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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RESEARCH relating to CHILDREN

Bulletin 20

Current and recently completed studies on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIAL, ECONOMIC, and CULTURAL INFLUENCES
- SOCIAL SERVICES and SURVEYS
- HEALTH SERVICES and SURVEYS

October 1965-May 1966

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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Washington, D.C., 20402 - Price $1.25

FOREWORD

This Bulletin, like previous issues, includes reports of research in progress or recently completed. With the exception of the long term research, it does not report again studies included in Bulletins 3 through 19 even though they may still be continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse October 1, 1965 through May 1966.

The Clearinghouse has only such information about the studies as the abstracts provide. Publication references and plans are given by some of the investigators but the Clearinghouse does not maintain bibliographic information on published reports of the studies. The reader who wishes to obtain further details about any of the projects reported should check professional journals in the appropriate field or write directly to the investigator.

For the Clearinghouse, I wish to thank those who have submitted reports on their own projects and those who have told us of other studies, and to acknowledge the valuable assistance of the Science Information Exchange, and the foundations which provide us with information about their research grants.

Katherine B. Oettinger

Katherine B. Oettinger
Chief, Children's Bureau
WELFARE ADMINISTRATION

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 211 is a form for letting us know of other investigators who are working in the field. Page 210 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

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LONG TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

20-AA-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver 20, Colo.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; Nutrition Foundation; National Live Stock and Meat Board; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Appropriate medical or scientific journals every year. Publication lists available.

20-AA-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Investigator(s): Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

20-AA-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

20-AA-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from prepuberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Assistant Professor of Physiology, Harvard School of Public Health, Boston 15, Mass.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.

Publication: Numerous journal articles; one book is planned, another possible.

20-AA-5 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT

Purpose: To investigate the relationship of biologic, genetic, and environmental factors in the parents--including events during pregnancy, labor, and delivery--to normal and abnormal development of offspring. Expected byproducts of investigation are relationships of these factors to pregnancy wastage in the form of early fetal death, perinatal mortality, infant and childhood mortality, and estimates of incidence of different types of abnormalities. In addition, detailed growth curves for children from birth to six years of age will be derived on a longitudinal basis, and estimates of illnesses and injuries in infancy and the preschool child will be derived.
Subjects: Members of the Kaiser Foundation Health Plan--a prepaid medical care program--who reside in the San Francisco-East Bay area.
Methods: Study is of a prospective, longitudinal type for both mother and child. Observations are made on the gravidas in the Department of Obstetrics and Gynecology, and on the children in the Pediatric Department, and are supplemented by special interviews and laboratory examinations. Physicians' observations are systematized and made more uniform. Special efforts are made to obtain information on members of study who do not return to the plan for medical care.
Duration: July 1959-indefinite.
Investigator(s): Jacob Yerushalmy, Ph.D., Professor of Biostatistics, University of California, Berkeley; Alexander L. King, M.D., Director of Pediatrics; and Robert W. King, M.D., Consultant, Department of Obstetrics and Gynecology, Kaiser Foundation Hospital, Oakland, Calif. (Reported by C. H. Peckham, M.D., 3783 Piedmont Ave., Oakland, Calif. 94611.)
Cooperating group(s): Division of Biostatistics, School of Public Health, University of California; Permanente Medical Group; Kaiser Foundation Research Institute.
Publication: Yerushalmy, J., "Statistical Considerations and Evaluations of Epidemiological Evidence," in Tobacco and Health, Chas. C. Thomas, publisher, 1962. American Journal of Obstetrics and Gynecology 87:5:609-620, November 1, 1963; 88:4:505-518, February 15, 1964. Vox Sanguinis 8:376-377, May-June 1963; 8:549-556, September-October 1963; 9:502-504, 1964. Human Biology 36:2:86-103, May 1964. Obstetrics and Gynecology 24:5:707-715, November 1964. American Journal of Diseases of Children 109:43-57, January 1965.

20-AA-6 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (35 years).
Subjects: Full term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above average group. 100 offspring of these subjects, age range from a few months to about 16 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs, and skeletal X-rays taken at

most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.
Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Associate Research Psychologist, Institute of Human Development, University of California, Berkeley 4, Calif.
Cooperating group(s): Institute of Human Development, University of California.
Publication: Studies in the Development of Young Children, University of California Press, 1940. Growth Diagnosis, University of Chicago Press, 1959. Child Development 12:167-173, 1941; 27:45-74, 1956. American Psychologist 10:805-818, 1955. Monograph, Society for Research in Child Development 28, 1963.

20-AA-7 MEDFORD, OREGON BOYS' GROWTH STUDY

Purpose: To construct cross-sectional, convergence, and longitudinal growth and acceleration curves for maturity indices, structural measures, strength tests and batteries, and motor ability elements; to relate various physical and motor growth factors to skeletal age, somatotype components, nutritional status, socio-personal adjustment, interests, and scholastic aptitude and achievement.
Subjects: Boys, seven to 18 years of age.
Methods: (1) Cross-sectional analyses for boys from 9 through 15 years of age; (2) convergence analyses, based on four-year sequences with each fourth year overlapping, for ages seven through 18 years; (3) longitudinal analyses from seven to 18 years; (4) intercorrelational and factor analyses of all traits for the different ages; (5) trace the development of all traits for boys who become athletes, honor roll students, school and other organization leaders, delinquents, and the like.
Duration: September 1956-May 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor, School of Health, Physical Education and Recreation, University of Oregon, Eugene, Oreg.
Cooperating group(s): Athletic Institute (Chicago, Ill.); Medford Public Schools; Curriculum Development Fund, Oregon State Department of Education; and Office of Scientific and Scholarly Affairs, University of Oregon.
Publication: Mimeographed report: "Initial Contributions and Implications of the Medford Boys' Growth Study, 1956 to 1965;" monographs; articles in professional journals.

20-AA-8 PATTERNS OF SOOTHING AND EXCITATION IN NEONATES

Purpose: To investigate the role of excitatory and inhibitory patterns in neonatal development through use of behavioral ratings and heart rate measurements. This research is part of a long-term study of regulatory principles and mechanisms which govern neonatal behavior (see Bulletin 5, Research Relating to Children).
Subjects: Normal, healthy, 2 to 5 day old full term babies born at Bronx Municipal Hospital Center.

Methods: Heart rate and behavioral ratings obtained for all experimental sessions. Each neonate tested at three sessions: test, retest on reactions to a series of soothing stimuli, and one session of trials of excitatory stimuli. Soothing stimuli applied when neonates are aroused are a tone, rocking, sweetened pacifier inserted in babies' mouths, immersion of babies' feet in warm water, and a control period. Each stimulus condition applied three times. Excitatory stimuli applied after feeding when neonates are quiescent are a tone, cold disc applied to the abdomen, and rocking.
Findings: Data analyzed with respect to (1) relationship between heart rate and behavioral ratings; (2) individual differences in overall soothability and in most effective soothing stimuli; (3) test-retest reliability on successive days; and (4) relationship between excitatory and inhibitory patterns.
Duration: January 1962-continuing.
Investigator(s): Sibylle Escalona, Ph.D., Professor of Psychology in Psychiatry; Wagner H. Bridger, M.D., Assistant Professor of Psychiatry; Beverly M. Birns, Ph.D., and Marion Blank, Ph.D., Instructors in Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York 61, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-AA-9 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semi-annual follow-up of more than 2,000 children registered at the Institute.
Methods: School Series: initially based on 600 school children in five schools (now 22 schools), ages 6 to 12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays. American Negro Series: 150 Negro children with normal occlusion selected to study with a view to establishing tentative standards of facial growth. Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc. Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made. Orthodontic Treatment Series: a small pilot study of 15 white boys, ages 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment. Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate. Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as faciodental growth dysplasia. Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern. Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional stability, and other aspects of classroom behavior to see if there is any real correlation.
Duration: 1947-1967.
Investigator(s): Wilton M. Krogman, Director, Philadelphia Center for Research in Child Growth; and F. E. Johnston, Ph.D., Assistant Professor of Anthropology, University of Pennsylvania, Philadelphia, Pa.

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Cooperating group(s): Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

20-AA-10 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns of all children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Co-chairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto, Calif.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publication: *Journal of Clinical Endocrinology and Metabolism* 22:1127-1129, November 1962; *Journal of Pediatrics* 62:5:631-645, May 1963.

20-AA-11 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland 1, Oreg.
Cooperating group(s): University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Recent articles: *Radiology*, April 1961; July 1962. *Journal of Dental Research*, July-August 1961; July-August 1962. *Human Biology*, February and September 1962.

20-AA-12 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4,483 Cleveland children; 134 Boston children; and a sample of Detroit children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to provide standards of reference.
Duration: 1948-1966.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., Professor and Head, Department of Anatomy, Stanford University, Stanford, Calif.
Cooperating group(s): Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.
Publication: Current standards: *Radiographic Atlas of Skeletal Development of Elbow and Shoulder*; *Radiographic Atlas of Skeletal Development of Hip*. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.

20-AA-13 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 15 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956.
Investigator(s): Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Oreg.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence,

R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publication: *Johns Hopkins Magazine*, June 1959; *Summary of Progress in Collaborative Perinatal Research* (A Nationwide Mother-Child Study), Public Health Service Research Profile No. 9, PHSP No. 1161, 1964.

20-AA-14 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Initiation date: 1936.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group(s): Lilly Endowment, Inc.
Publication: Published in *Union College Studies in Character Research*. Also *Dimensions of Character*, Macmillan, 1956.

GROWTH AND DEVELOPMENT

General

20-BA-1 THE COORDINATION OF 10 LONGITUDINAL STUDIES USING THE SAME GROUP OF CHILDREN AS SUBJECTS

Purpose: To interrelate findings of 10 investigators using a variety of measures on the same group of children in order to assess these measures in a wide personality framework of development.
Subjects: 120 Toronto children attending the school of the Institute of Child Study, University of Toronto. Subjects are first seen at age of nine months and at annual or semi-annual periods until they reach grade six.
Methods: Each investigator defines and pursues his own study taking it forward to publication. As data are obtained on same group of children, these are pooled in a central data bank and sent to the University Computer Center every six months where means, standard deviations and intercorrelations are obtained. Later factor analysis will be introduced.
Findings: First computer run was completed February 1965, on data obtained at the four year level on 40 four-year olds. These yielded approximately 2,000 intercorrelations between measures such as Binet, Leiter, Peabody, Szondi, Northway-Weld Sociometric, Kephart, Millichamp measure of pre-school mental health, measures of time and space orientation, writing, number concept and word recognition, a measure of creativity, of concept development, and measures of the parents' feeling of adequacy and security. These results have been recorded and are being examined by each individual investigator. At the same time the question of the most appropriate way to release the overall data is being considered.
Investigator(s): Mary L. Northway, Ph.D.; Dorothy A. Millichamp, M.A.; Betty Flint, M.A.; and Bruce Quarrington, Ph.D., Associate Professors of Psychology, Institute of Child Study, University of Toronto, 45 Walmer Rd., Toronto 4, Ont.
Publication: Preliminary statements have been released in the Bulletin of the Institute of Child Study, Nos. 100, 101, 102 and 103. Further plans are to publish each individual study in the appropriate scientific journal, and to release the overall findings for distribution to interested people working in the child development field.

20-BA-2 BEHAVIORAL AND PHYSIOLOGICAL REACTIVITY IN HUMAN NEONATES

Purpose: To test whether individual differences in patterns of reactivity to noxious stimuli are genetically determined.
Subjects: 17 neonates (preliminary study).
Methods: Behavioral measures (rating scale) and physiological measures (heart rate, respiratory rate, galvanic skin resistance and digital systolic blood pressure) of response to loud tones and electric shocks in swaddled newborns were recorded.
Findings: Individual infants were highly consistent in behavioral and physiological response levels across experimental conditions. Physiological variables failed to correlate among themselves. An infant's behavioral level was unrelated to his physiological level.
Duration: January 1965-December 1968.

Investigator(s): Joseph Schachter, M.D., Ph.D., Director, Research Training Program, Department of Psychiatry, and staff, College of Physicians and Surgeons, Columbia University, 722 W. 168th St., New York, N. Y. 10032.
Publication: Submitted to Child Development.

20-BA-3 THE NATURE OF DISTRESS REACTIONS IN INFANCY

Purpose: To describe characteristics of various kinds of crying together with associated autonomic changes, and to study their relations with both organismic and maternal variables.
Subjects: Normal infants from birth up to six months.
Methods: Exploration of methods of recording and measuring behavioral and physiologic variables including use of polygraphy and telemetry.
Findings: Method for establishing individual differences between normal newborns on dimensions related to distress reactivity.
Duration: September 1963-September 1966.
Investigator(s): J. A. Ambrose, Ph.D., Senior Research Psychologist, The Tavistock Institute of Human Relations, 2 Beaumont St., London W1, England.
Cooperating group(s): Medical Research Council, London; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in psychological and pediatric journals.

20-BA-4 KINESTHETIC STIMULATION OF PREMATURE INFANTS

Purpose: To study effects of the experience of prematurity relative to kinesthetic and other kinds of stimulation ordinarily missing.
Subjects: Singleton premature infants and twins.
Duration: November 1965-indefinite.
Investigator(s): Harold Boverman, M.D., Assistant Professor of Psychiatry, and Daniel Freedman, Ph.D., Assistant Professor of Human Development, University of Chicago, Chicago, Ill. 60637. (Reported by John F. Kenward, M.D., Director, Child Psychiatry, University of Chicago.)
Cooperating group(s): University of Chicago; State of Illinois, Department of Mental Health.
Publication: Paper presented at Orthopsychiatry meeting in 1966.

20-BA-5 A STUDY OF GROWTH AND DEVELOPMENT UP TO THE AGE OF FIVE YEARS OF CHILDREN FROM VARIOUS SOCIAL STRATA AND ETHNIC GROUPS IN ISRAEL

Purpose: To study physical, psychosocial, and intellectual growth and development of children in different population groups, from birth to age five; to study child-rearing practices in these population groups; on basis of data found, to study relationships between various aspects of child development and various child-rearing practices; and to investigate nature of differences.
Subjects: Several hundred children from birth to age five, differing in ethnic origin, social class, and educational level; women in third trimester of pregnancy.
Methods: Interviews, clinical examinations, nutritional assessment, anthropometric measurements, psychological observation, and testing.
Duration: Not reported-1971.
Investigator(s): Z. Shamir, M.D., M.P.H., Hadassah Medical School, Hebrew

University; J. Thaustein, M.D., Ministry of Health; and J. Smilansky, Ph.D., Henrietta Szold Research Institute for Children and Youth, Jerusalem, Israel.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-BA-6 THE DEVELOPMENTAL ABILITIES OF PRESCHOOL CHILDREN IN TERMS OF SOCIO-CULTURAL RESIDENCE

Purpose: To test some hypotheses about the differential abilities of preschool children in the slum, middle class, and suburban neighborhoods of the greater Cleveland area.
Subjects: 80 children from the inner-urban area; 60 children from the surrounding areas.
Methods: Each group was tested before and following a seven-month nursery school experience. Further follow-up testing is planned. Test battery consists of Peabody Picture Vocabulary Scale, a scale of drawing tasks to measure perceptual motor abilities, and pictures from the Stanford-Binet Intelligence Scale (L-M) to measure quality and extent of verbal expression.
Findings: Results have indicated initial discrepancies between inner-urban and surrounding area children, especially on the verbal tasks. With nursery school experience, the inner-urban group showed significant increases in developmental abilities, but not enough to make up the initial differences.
Duration: September 1964-June 1966.
Investigator(s): Robert M. Frumkin, Ph.D., Director of Research, Community Action for Youth, 1837 E. 79th St., Cleveland 44103; and Donald K. Freedheim, Ph.D., Clinical Psychologist, Mental Development Center, Western Reserve University, Cleveland, Ohio.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publication: Plan to publish a monograph and several papers for professional journals.

20-BA-7 FOLLOW-UP STUDY OF INFANTS FROM BIRTH, WITH PREGNANCY DATA BY INTERVIEW

Purpose: To study relationship between impairments and prenatal events; to study the interrelationship of impairments; and to develop standard research instruments for current and retrospective case histories.
Subjects: 200 infants, every 100th and 200th child born in Lanarkshire and Glasgow.
Methods: Standard interviews every six months with mothers conducted by their regular Health Visitors.
Duration: January 1965-December 1972.
Investigator(s): Denis H. Stott, Ph.D., Lecturer, Department of Psychology, University of Glasgow, Glasgow W. 2, Scotland.
Cooperating group(s): Advisory Committee for Medical Research, Scotland; Health Departments of City of Glasgow and County of Lanark.

20-BA-8 IDENTIFICATION AND EVALUATION OF CHARACTERISTICS OF KINDERGARTEN CHILDREN THAT FORETELL EARLY LEARNING PROBLEMS

Purpose: To identify and evaluate certain sensory and perceptual-motor characteristics of kindergarten children judged prognostic of early

learning problems, and to determine value of intensive specific training on identified characteristics in precluding such difficulty.
Subjects: Seven experimental and seven control kindergarten classes.
Methods: Use of Pintner-Cunningham and Metro-Reading Readiness Tests and 36 Motor-Sensory-Perceptual Tests in pre- and post-test situations; use of specified training program for six months with experimental group; follow-up testing of experimental and control pupils on primary reading and arithmetic achievement.
Duration: Not reported-November 1966.
Investigator(s): William K. Reece, District Psychologist, Rowland School District, Rowland Heights; and Charles E. Meyers, Ph.D., Professor and Chairman, Department of Educational Psychology, University of Southern California, Los Angeles 7, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-BA-9 A LIMITED LOGICAL ANALYSIS OF PICTURES APPLIED TO STUDY OF CHILDREN'S RESPONSES TO PICTURES

Subjects: 80 children in each age group (four, six, and eight years), randomly assigned to eight cells.
Methods: Experimental task is to match one of four test pictures with sample picture. Dependent variable is number of correct matching responses each subject makes in the case of 10 different sets of pictures. Each set is presented in random order and individually to subjects by rear projection. Correct response is reinforced with candy, incorrect response is corrected by indicating correct picture. Data are analyzed with an analysis of variance.
Duration: Not reported-1965.
Investigator(s): Donald T. Payne, Research Psychologist, Educational Testing Service, Princeton, N. J. 08540.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-BA-10 THE ROLE OF MEDICAL CARE IN THE PREVENTION OF DEVELOPMENTAL DEVIATION IN CHILDREN

Purpose: To test hypothesis that threats to healthy function of neonate influence maternal behavior and subsequently child development at age one.
Subjects: 1,140 infants in Collaborative Child Care Project, born at Pennsylvania Hospital between July 1, 1962 and June 30, 1963, and rated as to presence or absence of morbidity in first week of life.
Methods: Infants' mental, motor, and behavioral development at age one is assessed using interval histories and neurological examinations. Data are rated for behavioral deviation.
Findings: Correlations demonstrate significantly increased rate of deviations at one year in those infants with health threats during first five days of life.
Duration: July 1962-August 1967.
Investigator(s): Henry S. Cecil, M.D., Director, Division of Psychological Pediatrics, and William B. Carey, M.D., Children's Hospital of Philadelphia, 1740 Bainbridge St., Philadelphia, Pa. 19146.
Cooperating group(s): The Grant Foundation; National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper expected in Fall 1966.

20-BA-11 ASSESSMENT OF THE PRESCHOOL CHILD

Purpose: To develop measures for an overall assessment of the preschool child.
Subjects: Children ages 4 and 5.
Methods: Measures are being developed in following areas: environmental variables, learning and problem solving, concept formation, language, motor activity, attention and motivation, creativity, and emotional and social behavior. Initial effort will be devoted to identifying and examining existing materials appropriate for those age ranges as well as norms where they exist. New measures will be developed and data will serve as behavioral demography, criterical information for training programs, and possible predictors of school success. Relationship between performance on measures selected and subsequent school performance will be determined.
Duration: January 1966-1968.
Investigator(s): William O. Jenkins, Ph.D., Child Learning and Development, Center for Urban Education, 33 W. 42nd St., New York, N. Y. 10036.

20-BA-12 DEVELOPMENT OF EEG AND BEHAVIORAL RESPONSES TO SENSORY STIMULI

Purpose: To provide basic data on maturation of EEG and sensory evoked potentials of human infants during course of development; to attempt to relate data obtained from psychological and neurological testing with neurophysiological data; and to provide normative data for comparison with that obtained from patients with sensory and neurologic handicaps.
Subjects: A cross-section and longitudinal sample of normal children under three years of age; infants with sensory handicaps; and mentally retarded, mainly mongoloid infants.
Methods: Responses to sensory stimuli are recorded on electroencephalograph; psychological testing for development of form and pattern perception.
Findings: Some characteristics of auditory and visual evoked response in normal infants have been defined; EEG audiometry has been found to be a useful aid in diagnosis of deafness in young infants; electroretinogram of newborn shows *x*-wave component associated with photopic functions; mongoloid infants have sensory evoked responses which are of high amplitude and long latency.
Duration: 1964-1970.
Investigator(s): Ann B. Barnet, M.D., Research Associate in Neurology, Children's Hospital of the District of Columbia, 2125 13th St., N. W.; Ann Lodge, Ph.D., and Rhoda Goodwin, M.A., Research Psychologists, Washington School of Psychiatry, 1610 New Hampshire Ave., N. W., Washington, D. C. 20009.
Cooperating group(s): Department of Sensory Pathology, Division of Neuropsychiatry, Walter Reed Army Institute of Research; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Electroencephalography and Clinical Neurophysiology* 18:441-450, 1965; *Acta Oto-laryngologica* Supplement 206:134-146, 1965; others in preparation.

Physical

20-BD-1 GROWTH STANDARDS FROM 8 TO 14 YEARS OF AGE

Purpose: To develop, if possible, a statistical method for predicting growth in normals which would, if proven, provide a reliable basis for future studies in setting up similar methods in predicting aberrant growth patterns.
Subjects: Boys and girls from 8 to 14 years of age of North European descent exhibiting normal dental-facial growth.
Methods: A longitudinal study of the same individuals using refined cephalometric methods of appraisal.
Findings: For normals, biostatistical evaluations seem highly reliable; however, no check as yet on various ethnic groups or various population samples has been done.
Duration: 1964-indefinite.
Investigator(s): Robert M. Nelson, D.D.S., M.Sc.O., Professor and Chairman, Department of Orthodontics, School of Dentistry, University of North Carolina, Chapel Hill, N. C.

20-BD-2 EFFECT OF NEUROMUSCULAR ACTIVITY ON ACHIEVEMENT AND INTELLIGENCE OF KINDERGARTEN CHILDREN

Purpose: To measure short-term effects of gross and fine neuromuscular activity on kindergarten children.
Subjects: 88 kindergarten children, divided into two control and two experimental groups. Middle and lower socio-economic levels were involved, each furnishing an experimental and a control group.
Methods: Pre- and post-intelligence, readiness, and physical fitness tests are administered. The differences between the gain scores of the equated experimental and control groups are tested for statistical significance. A 2 x 2 analysis of variance was made on the results in each area -- physical fitness, achievement, and intelligence.
Findings: The difference in gains between experimental and control groups was found to be statistically significant in favor of the experimental group. Program emphasis within one experimental group was more in the area of gross neuromuscular skills whereas the other concentrated more on fine neuromuscular skill work. Differences in gain areas are believed to be attributable to this variance.
Duration: September 1964-September 1965.
Investigator(s): Orval M. Conner, Ph.D., Elementary Consultant, Division of Instruction, Battle Creek Public Schools, 73 Capital Ave., N.E., Battle Creek, Mich.
Publication: Articles based on findings are planned.

20-BD-3 EXPERIENCE AND THE DEVELOPMENT OF THE BLINK RESPONSE TO AN APPROACHING VISIBLE TARGET

Purpose: To determine the course of development of the blink response under standard hospital conditions, and to determine whether this development is responsive to environmental factors.
Subjects: 90 normal infants born and reared in a state institution.

Methods: Blink responses are elicited under standard conditions and objectively recorded simultaneously with a record of stimulus activity. Groups of infants are reared under systematically altered conditions.
Findings: Blink responses to visible stimuli do not appear with regularity before 6 to 8 weeks of age and seem to be obligatory by 12 to 14 weeks.
Duration: January 1965-April 1967.
Investigator(s): Burton L. White, Ph.D., Research Associate, Graduate School of Education, Harvard University, Cambridge, Mass.
Cooperating group(s): Massachusetts Institute of Technology; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results will be submitted for publication as they become available.

20-BD-4 THE INFLUENCE OF ENVIRONMENTAL FACTORS UPON THE OSSEOUS DEVELOPMENT OF THE WRIST AND HAND OF INFANTS AND PRESCHOOL CHILDREN

Purpose: To determine the effects of maternal health, size at birth, rate of growth, nutrition status, and significant illness on the osseous development of the wrist and hand of Negro infants and preschool children.
Subjects: More than 400 young children of 167 mothers representative of a stable population of Negroes that avail themselves of the health services of the Alachua County Health Department. All children were entered at birth or were siblings less than six years of age when study was initiated.
Methods: Longitudinal data on stature, weight, and other anthropometric measurements are collected on subjects for six years. Total health and personal histories, dietary patterns, nutritional status evaluations, and series of hand X-rays are obtained at three month intervals during first year of life and annually thereafter. Socio-economic and physical health data are obtained on family groups. Data are recorded on IBM cards and analyzed by computer.
Findings: Growth in stature and weight of Negro children from birth to six years of age approximates standards based on Iowa white children in good health when nutritional requirements are met, and is not significantly different when moderate degrees of inadequacy are experienced. Skeletal maturation is a more sensitive indicator of nutritional deficiency.
Duration: January 1958-January 1968.
Investigator(s): Ruth O. Townsend, R.N., B.S., Assistant in Nutrition, and Roland B. French, Ph.D., Biochemist, Department of Food Technology and Nutrition, Agriculture Experiment Station, University of Florida, Gainesville, Fla.
Cooperating group(s): Alachua County Health Department; Department of Anatomy, J. Hillis Miller Health Center, University of Florida.
Publication: Series of publications planned in appropriate journals.

20-BD-5 VISUAL DISCRIMINATION IN THE HUMAN NEWBORN

Purpose: To specify dimensions of stimulation discernible to human newborn two to three days of age.
Methods: Measurements are taken of relative positions of corneal reflections of various stimuli relative to that of pupil to determine degree of fixation. This is accomplished by electronic recording and analysis of eye movements and fixations in a paired-comparison preference design.
Duration: January 1965-December 1967.
Investigator(s): Maurice Hershenson, Ph.D., Assistant Professor of Psychology, University of Wisconsin, Madison, Wis. 53706.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BD-6 OPERANT CONDITIONING OF EYE MOVEMENTS IN INFANTS

Purpose: To obtain operant conditioning of visual fixation in infants.
Subjects: 80 infants 13 to 14 weeks of age.
Methods: Differential reinforcement of fixation with respect to two spatial positions; recording of direction of regard during an eight-minute session involving a preconditioning, a conditioning, a reverse contingency, and an extinction period. Periods are consecutive and last two minutes each.
Duration: September 1964-August 1965.
Investigator(s): John S. Watson (Doctoral Candidate, Cornell University), Research Associate, and Irving E. Sigel, Ph.D., Chairman, Department of Research, Merrill-Palmer Institute, 71 E. Ferry Ave., Detroit, Mich. 48202.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BG-1 A STUDY OF CERTAIN FACTORS RELATED TO THE ACCEPTANCE BY SIXTH GRADE CHILDREN OF CAROTENOID-RICH VEGETABLES

Purpose: To find factors related to acceptance of vegetables which may be used as a basis for an educational program through the school lunch to increase the intake of carotenoid-rich vegetables, lacking in diets of many Iowa children.
Subjects: 59 sixth grade children in a city public school who participate in the school lunch program.
Methods: On the basis of 23 daily observations of the acceptance of vegetables in the lunch, the 59 children were classified into three groups. Three standard psychology tests were administered to obtain information on certain personality traits: flexibility, adventuresomeness, and personal and social adjustment. Information was obtained from school records regarding family background and child's height-weight record. A checklist of foods classified as salty, sweet, sour or bitter was used to determine children's preferences for foods with these four basic tastes. Broccoli or sweet potatoes prepared and seasoned in a variety of ways was served to the children who indicated their preferences and reasons for their reactions.
Duration: October 1965-June 1966.
Investigator(s): Sue Ann Hixson, Graduate Assistant; Maxine Hinton, Ph.D., Associate Professor of Food and Nutrition; and Ercel Eppright, Ph.D., Assistant Dean and Director of Research, Iowa State University, Ames, Iowa 50010.
Cooperating group(s): Agricultural and Home Economics Experiment Station.
Publication: Plan to publish.

20-BG-2 DIETS AND NUTRITURE OF PRESCHOOL CHILDREN IN LOW AND MIDDLE INCOME FAMILIES

Purpose: To determine nutritional situation of two- and three-year old children in longterm, low income families and children of same ages in higher income families having similar ethnic backgrounds. To investigate relationship of children's nutriture to their earlier and current diets

and health; their mothers' age, education, employment outside home, and attitudes toward feeding young children; and their families' food management practices in the home.
Subjects: Approximately 250 two- and three-year old children in longterm low income families of Hawaiian ancestry and children of same ages in higher income families having similar ethnic backgrounds in Honolulu.
Methods: Information is obtained on socio-economic characteristics and food management practices of the family by home interview, and on food intake of the child by a food record. After completion of food record, each child will be given a clinical examination by a physician and a psychometer test for mental development. Urine and blood samples will be collected for analysis.
Duration: March 1966-1970.
Investigator(s): Sadye F. Adelson, M.S., Chief, Food Consumption Branch, Consumer and Food Economics Research Division, U. S. Department of Agriculture, Hyattsville, Md. 20782; and Myrtle Brown, Ph.D., Head, Division of Nutrition, College of Tropical Agriculture, University of Hawaii, Honolulu, Hawaii. (Reported by Faith Clark, Director, Consumer and Food Economics Research Division.)
Publication: Journal articles planned.

20-BG-3 NATIONWIDE SURVEY OF FOOD INTAKE OF INDIVIDUALS (CHILDREN AND ADULTS), SPRING 1965

Purpose: To provide current information on food and nutrient intake of a nationwide sample of individuals.
Subjects: All infants and other children among approximately 13,000 individuals in base sample of households drawn for nationwide survey of food consumption.
Methods: Trained interviewers obtain information in home interviews on prepared schedule forms on: kinds and amounts of food eaten at home and away from home during day preceding interview; time of day at which meals and snacks were eaten; place where food that was not from home food supplies was eaten; cost of purchased meals and snacks eaten away from home; and certain socio-economic characteristics of the family. Nutritive value of the diets will be calculated using tables of food composition; classification and tabulation will be by age and sex of individual, region, degree of urbanization, income class of family, and other characteristics.
Duration: November 1964-1969.
Investigator(s): Sadye F. Adelson, M.S., Chief, and Beryl G. Becker, M.S., Nutrition Analyst, Food Consumption Branch, Consumer and Food Economics Research Division, U. S. Department of Agriculture, Hyattsville, Md. 20782. (Reported by Faith Clark, Director, Consumer and Food Economics Research Division.)
Publication: U. S. Department of Agriculture bulletins, journal articles, other.

20-BJ-1 A LONGITUDINAL STUDY OF SKELETAL GROWTH OF PREMATURES

Purpose: To investigate growth of prematures, including increments of growth, from birth through five years of age, and hopefully through adolescence.
Methods: Accumulation of data to establish distance and velocity curves for growth of premature infants born at varying gestational ages and in varying birthweight groups.
Duration: 1962-1967.

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Investigator(s): Mary O. Cruise, M.D., Assistant Professor of Pediatrics, and Newton Scatchard, M.D., Clinical Professor of Radiology, Children's Hospital, 219 Bryant St., Buffalo, N. Y. 14222.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BJ-2 A STUDY OF THE EXTENSIBILITY AND THICKNESS OF THE HUMAN CHEEK

Purpose: To compare force exerted against maxillary left first molar by cheek at rest with muscle extensibility in twin and nontwin children aged 5 to 16 years.
Subjects: 12 sets of similar twins; 10 sets of dissimilar twins.
Methods: Application of a mechanical device to deform cheek by means of a plunger, activated by weights riding over a pulley. Cheek thickness is measured with a specially modified Harpenden caliper. Minimal maxillary breadth is measured from A-P cephalograms, and bimolar breadth from dental impressions.
Findings: Resting force correlated significantly with stiffness factor; it did not correlate significantly with age, but stiffness factor did. Bimolar breadth and minimal maxillary breadth were correlated with each other, but not with resting force or stiffness factor. Insignificant differences appeared between similar and dissimilar twins on all variables.
Duration: June 1964-June 1965.
Investigator(s): Stanley M. Franklin, D.D.S., M.S.D., College of Dentistry, University of Nebraska, Lincoln, Nebr. 68508. (Reported by Edward I. Fry, Ph.D., Associate Professor of Anthropology, University of Nebraska.)
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Available at Dental College Library, University of Nebraska, Lincoln.

20-BJ-3 FOOD-SOIL-CARIES RELATIONSHIPS

Purpose: To determine whether caries prevalence in children is related to soil types, as has been indicated in the New Zealand Study.
Subjects: School children ages 8 to 12.
Methods: Samples of school children with a life-long residence in areas of contrasting soil types as designated by the Plant, Soil, and Nutrition Laboratory of the U. S. Department of Agriculture will be examined by a single examiner to determine relative caries prevalence.
Duration: November 1965-November 1967.
Investigator(s): Basil G. Bibby, D.M.D., Ph.D.; Thomas G. Ludwig, B.D.S., M.S.; and Fred L. Losee, D.D.S., M.S., Eastman Dental Center, 800 Main St. East, Rochester, N. Y. 14603.
Cooperating group(s): U. S. Department of Agriculture.

20-BM-1 MOTOR PERFORMANCE TESTING OF ELEMENTARY SCHOOL AGE CHILDREN

Purpose: To test and analyze motor performance of boys and girls in grades one through six.
Subjects: 2,840 boys and girls enrolled in 22 selected public schools in Minnesota.

Methods: Students were observed in physical education classes for ability in overhand throw for distance, wall pass, soccer punt, soccer wall volley, volleyball serve, softball pitch for accuracy, short potato race, pull-ups, jump and reach, rope skipping, sit-ups, Hanson Shoulder Test, modified Bass Balance Test, 50-yard dash, broad jump, and the 600-yard walk-run.
Findings: Within grades, boys were generally superior to girls in motor performance with exception of rope skipping and balance. When evaluated by sex, children in one grade were generally superior in performance to those in the grade below.
Duration: March 1963-August 1965.
Investigator(s): Margie R. Hanson, Ph.D., Elementary Consultant, American Association for Health, Physical Education, and Recreation, 1201 16th St., N.W., Washington, D. C. 20036.
Cooperating group(s): State of Minnesota; Jay Phillips Foundation, St. Paul, Minn.
Publication: Research Quarterly, 1966; State of Minnesota Curriculum Guide of Elementary Physical Education will carry percentile norms for 16 motor tests.

Perceptual

20-BP-1 ADAPTATION AND PERCEPTION IN EARLY INFANCY

Purpose: To study relationships between infant-caretaker interaction and development of attentive perceptual functions in first two months of life.
Subjects: 30 healthy neonates of normal gestation and delivery.
Methods: Comparison of variables in four different caretaking environments by means of automatic 24-hour interactional monitoring and special methods for assessing both quantitative and qualitative dimensions of infant perceptual function.
Duration: September 1965-August 1969.
Investigator(s): Louis W. Sander, M.D., Associate Research Professor of Psychiatry, and Gerald Stichler, Ph.D., Assistant Research Professor of Psychiatry, Medical Center, Boston University, 80 Concord St., Boston, Mass.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BP-2 HEREDITARY FACTORS IN THE PERFORMANCE OF PERCEPTUAL MOTOR TASKS

Purpose: To determine degree of genetic control of perceptual motor tasks in twins.
Subjects: 45 pairs of like-sexed twins from Atlanta, Georgia, 33 identical, and 12 fraternal: 32 boys and 58 girls, 40 Negro and 50 white, age 13 to 18 years.
Methods: Administration of a battery of tests: Surface Development Test, Mazes, Newcastle Spatial Test, Paper Folding Test, Identical Pictures Test, Object-Aperture Test, and Cube Comparisons.
Findings: Heredity and environment produce significantly greater differences in fraternal twins on mental tests of visualization, perceptual speed, and spatial orientation than environmental influences alone produce in identical twins.
Investigator(s): R. Travis Osborne, Ph.D., Professor of Psychology, University of Georgia, Athens, Ga.; and A. James Gregor, Ph.D., University of Kentucky, Lexington, Ky.

20-BP-3 FACIAL REACTIONS TO SIMPLE STIMULI IN THREE-DAY OLD HUMAN INFANTS

Purpose: To determine facial reactions of infants to the odor of acetic acid and to the withdrawal of a nipple.
Subjects: 12 infants, three-days of age at Naval Medical Hospital.
Methods: 16mm motion picture films taken of infants while they are exposed to acetic acid or while a nipple on which they are sucking is removed from the mouth. Ratings are made from films by two independent judges.
Findings: There is a difference in facial expression reactions to these two situations.
Duration: 1963-not reported.
Investigator(s): Robert Plutchik, Ph.D., Hofstra University, Hempstead, N. Y.; and Richard Q. Bell, Ph.D., Laboratory of Psychology, National Institute of Mental Health, Bethesda, Md.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Plan to submit for publication in fall 1966.

20-BP-4 DEVELOPMENTAL STUDIES OF VISUAL SCANNING DISJUNCTIVE REACTION TIME, AND INFORMATION PROCESSING

Purpose: To throw light on problems of perceptual development.
Subjects: Second grade through adults.
Duration: Partially completed.
Investigator(s): Eleanor J. Gibson, Ph.D., Senior Research Associate, Department of Psychology, Cornell University, Ithaca, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-BP-5 DEVELOPMENT OF VISUAL FORM PERCEPTION IN THE HUMAN INFANT

Purpose: To attempt to systematically relate infant visual form discrimination ability to selected quantitative dimensions of two-dimensional shapes; to study development of form perception with infants at different ages; and to compare ability of infants to discriminate form with that of human adults and various subhuman subjects.
Subjects: 15 to 20 infants between four and six months old.
Methods: Apparatus allows for selection of projected visual material through a simple motor response by infant. Subject is provided a control lever which, when moved to right or left, activates a slide projector, thereby selecting one or the other of a pair of stimuli for viewing. Number of times a stimulus is selected and time spent viewing each stimulus are recorded. Subjects are conditioned to operate control lever by using monochromatic stimuli so that naivete relative to random forms is maintained. Twenty pairs of stimuli are used, five at each of four levels of complexity.
Duration: Not reported-April 1969.
Investigator(s): Donald R. Brown, Ph.D., Department of Psychology, Purdue University, Lafayette, Ind.

20-BP-6 FACTS OF NORMAL VISION IN READING OR LEARNING DEFICIT

Purpose: To relate perceptual mechanisms, whose existence has been

established by previous studies, to performance on reading, learning, and other perceptual tasks; to investigate individual differences in performance by selecting discrete samples for intensive analysis from large-N studies.
Methods: Analysis of reading and learning performance of subjects who apparently scan a tachistoscopic binary visual pattern from right to left rather than in the usual left-to-right direction for English-reading people.
Duration: June 1965-May 1968.
Investigator(s): E. Rae Harcum, Ph.D., Associate Professor of Psychology, College of William and Mary, Williamsburg, Va. 23185.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BP-7 EIDETIC IMAGERY IN CHILDREN

Purpose: To continue longitudinal study of eidetic children in New Haven, retesting them yearly; to obtain a new sample of eidetic children in Rochester, N. Y., both to provide more children for investigation, and to make these children available for participation in some laboratory studies of perception, imagery, and memory; and finally, to undertake a systematic cross-cultural study in Ghana, West Africa, to investigate nature of imagery in more detail, its prevalence in relation to acculturation, and how it correlates with other perceptual and cognitive tasks, especially how it is used as a replacement or supplement for reading skills.
Subjects: 12 eidetic children.
Methods: Detailed procedures are described to test for presence of eidetic imagery in children, including showing each child a number of colored patches and then pictures, tape recording all they describe, of images and of their memory of stimuli. Interviews follow standard formats, concentrating on relation of child's eidetic imagery to rest of his development. African study is modelled after one completed in Nigeria, which followed these procedures with appropriate modifications.
Duration: March 1965-February 1967.
Investigator(s): Ralph N. Haber, Ph.D., Professor, and Ruth B. Haber, Ph.D., Research Associate, Department of Psychology, University of Rochester, Rochester; and Margaret Feldman, Ph.D., Research Associate, Institute of Child Development, Cornell University, Ithaca, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Communication

20-BU-1 THE RELATIONSHIP OF CHILD LANGUAGE TO LINGUISTIC LEVELS

Purpose: To test for discrepancy between a scientifically correct analysis and the actual "natural facts" with particular regard to separation of linguistic levels.
Subjects: Investigator's own children and others.
Methods: Collection of data by passive observation and induced experiment.
Findings: There seems to be concordance between linguistic analysis and "natural" data.
Duration: 1965-indefinite.

Investigator(s): Walburga von Raffler Engel, Ph.D., D.Litt., Visiting Associate Professor of Linguistics, Vanderbilt University, Nashville, Tenn. 37203.

20-BU-2 EFFECTS OF SPEECH STIMULI UPON INFANT VOCAL BEHAVIOR

Purpose: To define categories of language stimuli which influence vocal behavior of infants under one year of age.
Subjects: Eight-month old children drawn from local hospital birth lists.
Methods: Subjects were permitted to hear playback of their own vocal responses 3.75 seconds following emission of responses. Comparisons with spontaneous vocal play show that when subjects demonstrate rate increases during self-sound feedback, more high frequency components appear in their vocal responses. A second study involved presentation of selected vowel and consonant sounds to eight-month old subjects.
Findings: Compared with spontaneous vocal responses, behavior changed during treatment periods. During stimulation with vowels subjects reduced proportion of vowel responses; during stimulation with consonants subjects reduced proportion of consonant responses.
Duration: June 1965-June 1966.
Investigator(s): Ronald L. Webster, Ph.D., Assistant Professor of Psychology, Hollins College, Hollins College, Va.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results to be submitted for publication during summer 1966 to a journal not yet selected.

20-BU-3 WORD ASSOCIATIONS OF YOUNG CHILDREN

Purpose: To study vocabulary development of young children.
Subjects: Intercity Negro and white children of low socio-economic status.
Methods: Samples of children matched on I.Q., grade level, and sex; word association responses sorted and analyzed by digital computer.
Duration: September 1965-August 1966.
Investigator(s): Doris R. Entwisle, Ph.D., Assistant Professor of Engineering Science and of Social Relations, Johns Hopkins University, Baltimore, Md. 21218.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Psychological Reports 13:291-299, 1963; Journal of Verbal Learning and Verbal Behavior 3:19-29, 1964; Sociometry 29:67-84, 1966; Journal of Verbal Learning and Verbal Behavior, in press.

20-BU-4 HESITATION PHENOMENA IN INFORMAL SPEECH

Purpose: To discover psycholinguistic units of encoding.
Subjects: 10,000 words of informal speech of fifth graders.
Methods: Location of five classes of hesitation phenomena in terms of form classes and possibly rough syntactic position.
Duration: February-November 1966.
Investigator(s): Marion A. Wenger, Ph.D., Professor, and Margaret Hubbard Jones, Ph.D., Research Psychologist and Lecturer, University of California

at Los Angeles, Los Angeles, Calif. 90024.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to a psychological journal; report will be available from investigators about December 1, 1966.

20-BU-5 LINGUISTIC DIFFERENCES BETWEEN BILINGUAL MEXICAN-AMERICAN CHILDREN AND MONOLINGUAL ANGLO-AMERICAN CHILDREN

Purpose: To illustrate linguistic differences between these two groups of children as determined by several linguistic measurements.
Subjects: 80 second grade public school pupils.
Methods: Four subtests of Illinois Test of Psycholinguistic Abilities are administered; subjects are then stimulated with pictures to obtain 50 verbal responses, which are analyzed according to mean length of response, one-word responses, and complexity of verbalizations to allow comparison with other studies on language development.
Duration: February-June 1966.
Investigator(s): Bonnie Olpin, M.A., Student, and T. D. Hanley, Ph.D., Speech and Hearing Clinic, University of California at Santa Barbara, Santa Barbara, Calif. 93103.

20-BU-6 DEVELOPMENT OF COMMUNICATION SKILLS PROJECT

Purpose: To foster development of communication skills with inarticulate children unable to use psychotherapy.
Subjects: Four boys and two girls, ages 10 to 12 years.
Methods: A modified form of creative dramatics, led by a speech teacher for a total of 42 sessions over a five-month period. Tape recordings were made of each session, and observations were made through a one-way mirror.
Findings: Children showed increased range and depth of expression, greater spontaneity, and developed an increased capacity to communicate inner fantasy activity.
Duration: December 1964-October 1965.
Investigator(s): Marvin I. Shapiro, M.D., Clinical Associate Professor of Child Psychiatry, Department of Psychiatry, University of Pittsburgh Medical School, and Pittsburgh Child Guidance Center, 201 Desota St., Pittsburgh 13, Pa.
Cooperating group(s): Department of Speech, University of Pittsburgh; The Maurice Falk Medical Fund.
Publication: Final project report will be made to Falk Foundation.

20-BU-7 RECEPTIVE AND EXPRESSIVE CONTROL OF THE PLURAL IN HEAD START YOUNGSTERS

Purpose: To ascertain preschoolers' understanding of inflectional endings for plural; to assess preschoolers' use of plural inflectional endings.
Subjects: Children in Washington, D. C. Head Start Programs.
Methods: Materials designed to elicit child's one-word response regarding singular or plural are presented to each child individually. A receptive as well as an expressive task is presented. Imitative and generative scores are obtained.
Findings: There appears to be a difference between receptive control and expressive use of certain inflectional endings in the groups tested.

Duration: November 1965-September 1966.
Investigator(s): Joan C. Baratz, Ph.D., Assistant Professor, Department of Speech, University of Maryland, College Park, Md.
Cooperating group(s): Head Start projects in the District of Columbia area.
Publication: Submitted to American Speech and Hearing Association 1966 convention.

20-BU-8 PATTERNS OF PSYCHOLINGUISTIC DEVELOPMENT DURING EARLY AND MIDDLE CHILDHOOD

Purpose: To investigate the validity of the "differentiation hypothesis" within the context of the development of psycholinguistic abilities between two and nine years.
Subjects: Children between the ages of two and nine years.
Methods: Individual testing with the Stanford-Binet and all the nine subtests of the Illinois Test of Psycholinguistic Abilities. Factor analysis used to discern changes in patterns of abilities from age to age.
Findings: General ability becomes more and more restricted in its comprehensiveness as the age advances while group abilities become gradually more pronounced.
Duration: February 1965-March 1966.
Investigator(s): Mohammed Y. Quereshi, Ph.D., Associate Professor of Psychology, Marquette University, Milwaukee, Wis.
Publication: Submitted to *Educational and Psychological Measurement*.

20-BU-9 MONITORING OF VERBAL BEHAVIOR

Purpose: To assess effects of introducing objective recording devices of which a subject is aware upon his subsequent behavior.
Methods: A portion of spontaneous daily verbal behavior of children is monitored, using a miniature radio transmitter, microphone, and tape recording system. Analysis of both structural and dynamic aspects of conversation is carried out over time to observe degree to which adaptation to instruments occurs. In addition, children's speech is recorded during experimental sessions under two conditions--when child is aware that his speech is being recorded, and when he is unaware.
Investigator(s): Kenneth Purcell, Ph.D., Director, and Kirk Brady, M.A., Research Clinical Psychologist, Behavior Science Division, Children's Asthma Research Institute and Hospital, 3401 W. 19th Ave., Denver 4, Colo.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-BU-10 DELAYED FEEDBACK AUDIOMETRY

Purpose: To determine effects of delayed auditory feedback of vocalizations on patterns of speech motor activity during first few years of life.
Methods: Will study delayed auditory feedback of infant cries, proceeding through stages of babbling, imitative vocalization, and early grammatical refinement of speech communication; will use information about effects of delayed auditory feedback to develop new techniques for evaluation of hearing acuity in infancy and early childhood.
Investigator(s): Richard Allen Chase, M.D., Assistant Professor of Psychiatry and Director, Neurocommunications Laboratory, School of

Medicine, Johns Hopkins University, Baltimore, Md. 21205.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

20-BU-11 EXPANSION TRAINING AND THE CHILD'S ACQUISTITION OF GRAMMAR

Purpose: To determine effects of expansion training and of simple exposure to well-formed sentences on the child's acquisition of grammar.
Subjects: Girls, 30 to 36 months old, single children of parents with less than a high school education. Subjects are selected at about the same level of grammatical development initially.
Methods: Subject's telegraphic utterance is "expanded" by adding to the content words she speaks those functors (articles, prepositions, inflections, conjunctions, pronouns, and auxiliary verbs) which result in a simple sentence appropriate to the total situation. One group is given intensive and deliberate expansion training; another group has intensive exposure to well-formed sentences; a third group receives no special training. After a three-month period, grammatical development of two training groups and control group is compared from test data and analysis of spontaneous speech samples.
Duration: 1964-December 1965.
Investigator(s): Roger W. Brown, Ph.D., Professor of Social Psychology, and Mrs. Courtney Cazden, Research Assistant, Department of Social Relations, 1270 William James Hall, Harvard University, Cambridge, Mass. 02138.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Intellectual

20-CA-1 FORM-COPYING ABILITY OF KINDERGARTEN CHILDREN

Purpose: To define and describe characteristics of young children's form-copying ability and to determine rate of change in this ability.
Subjects: 140 kindergarten children, 74 boys and 66 girls, for whom results were available for all four tests. Chronological age range was 57 to 69 months; mean age was 63.35 months.
Methods: Bender Gestalt Test was administered as a group test in September, November, February, and May of the kindergarten year. Protocols were scored with an objective rating scale and analyzed for presence of eight performance characteristics, with emphasis on definition and description of rate and kinds of changes in copying ability.
Findings: There was clear and significant improvement in performance on the Bender during the kindergarten year. Means and standard deviations for the four administrations were 25.31 (3.07), 26.83 (2.12), 26.51 (2.04), and 27.51 (2.04). Analysis of variance revealed significant differences between means for administrations I and II, I and IV, and III and IV (P= .01). Correlation of total scores between administrations were all significant (P= .01), with magnitude of Pearson r ranging from .55 to .65. Girls were favored on the first administration.
Duration: September 1963-November 1965.
Investigator(s): Barbara K. Keogh, Ph.D., Psychologist, Children's Hospital, Los Angeles; and Carol E. Smith, Ph.D., System Development Corporation, Los Angeles, Calif.

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Cooperating group(s): Manhattan Beach, California, Elementary School District.
Publication: Planned in appropriate psychological or educational journal.

20-CA-2 LOGICAL THINKING IN SECOND GRADE

Purpose: Drawing on theoretical formulations and experiments of Piaget, to test the effects on logical thinking in the second grade, of instruction in kindergarten in the basic concepts of mathematics and science.
Subjects: 650 children in five school systems in New York and California.
Methods: Individual interviews derived from Piaget; classroom observations; teacher questionnaires.
Duration: September 1965-August 1968.
Investigator(s): Millie Almy, Ph.D., Professor of Psychology and Education, Teachers College, Columbia University, New York, N. Y. 10027.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-CA-3 ACQUISITION OF GEOGRAPHIC CONCEPTS: PERSPECTIVE ABILITY IN CHILDREN

Purpose: To develop appropriate measuring procedures and instruments for determining level of perspective ability among children ages five through 12 years; to begin the establishment of a baseline set of norms for American children of the present time and to compare these with the findings of Piaget in his work with European children; to explore the range of individual differences among children in their acquisition of perspective ability; and to develop additional hypotheses for further research which can contribute to understanding and better teaching of geographic concepts in the elementary school social studies program.
Subjects: 150 children, ages five through 12 years; 73 children were retested in a reliability study making a total of about 225 test scores available for analysis and interpretation.
Methods: A three-dimensional map of a fictitious island group was constructed and mounted on an adjustable circular table. Children were shown photographs taken from various positions around the outer edge of the map and asked to identify where the camera had to be when each photograph was taken. Scoring was based on the amount of error from the correct position of the camera for that picture. Two kinds of total scores were available for analysis, one showing overall tendency to make errors to the left or to the right and another showing gross error. In addition, background information was gathered on each child and amount of time consumed in the test was recorded along with anecdotal comments concerning the child's strategies in the perspective test situation.
Findings: In confirmation of the work by Piaget, pilot investigations indicate that most children in the nine through 12 year age range have a fairly well developed perspective ability. The sharpest break seems to occur between children in kindergarten and first grade and those who are enrolled in third grade and above.
Duration: January 1966-August 1969.
Investigator(s): Jack W. Miller, Ed.D., Professor of Elementary Education, School Learning Institute, John F. Kennedy Center for Research on Education and Human Development, George Peabody College for Teachers, Nashville, Tenn.
Cooperating group(s): Carnegie Corporation.
Publication: A preliminary publication is anticipated for 1967; later publication will be made as results of investigation become available.

20-CA-4 INTELLECTUAL DEVELOPMENT AND ORPHANAGE EXPERIENCE

Purpose: To answer two questions: (1) Will increasing variability of auditory and visual input during first year decrease degree to which infants in an orphanage are retarded?; and (2) will adolescents raised in same orphanage setting show greater intellectual defects than family-reared children?
Subjects: Children in an orphanage in Teheran where an earlier study found 60 percent of two-year olds not sitting up alone and 85 percent of four-year olds not walking alone.
Methods: Provide variations of stimulation by tape recordings and mobiles in order to compare ages at which various Piaget-observed schemata appear in stimulated infants and in infants developing in customary fashion of this orphanage; compare performances of a sample of orphanage-reared adolescents with those of a sample of family-reared adolescents of Teheran on following measurements: Piaget's procedures for uncovering concrete and formal operations, Raven's Progressive Matrices, a translation of Wechsler-Bellevue Children's Scale, Smedslund's test of concrete intelligence adapted from Piaget and, possibly, Cattell's (1940) culture-fair test of intelligence.
Duration: 1965-1969.
Investigator(s): J. McVicker Hunt, Ph.D., Professor of Psychology, University of Illinois, Urbana, Ill. 61803; and Parvin Birjandi, Ph.D., Assistant Professor of Psychology and Dean of Women, University of Teheran, Teheran, Iran.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CA-5 THE DEVELOPMENT OF SET

Purpose: To test several hypotheses regarding preparatory set, defined by a curve relating simple auditory reaction time as a function of preparatory intervals (RT x PI function).
Methods: Set is examined at various age levels from six through 19, with five values of PI's (the intervals between an alerting signal and a reaction signal).
Duration: 1965-1967.
Investigator(s): Rogers Elliott, Ph.D., Assistant Professor of Psychology, Dartmouth College, Hanover, N. H.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CD-1 PASSIVITY AND STYLES OF THOUGHT IN CHILDREN

Purpose: To study growth of cognitive dimensions during first four years of life.
Subjects: 160 first-born, Caucasian infants.
Methods: Longitudinal study of perceptual functioning, play behavior, language, and quality of interaction with mother.
Findings: Educational level of parent is positively related to level of cognitive development at 8 to 12 months of age.
Duration: September 1964-1969.
Investigator(s): Jerome Kagan, Ph.D., Professor of Psychology, Harvard University, Cambridge, Mass.
Cooperating group(s): National Institute of Mental Health, National

Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Personality and Social Psychology 2:154-160, 1965; Merrill-Palmer Quarterly 11:95-127, 1965; J. D. Krumboltz (Ed.), Learning and the Educational Process, Chicago: Rand McNally, 1965, pp. 133-161; Child Development 36:609-628, 1965; Journal of Abnormal Psychology 71:17-24, 1966; Journal of Personality 34:118-128, 1966; three other articles in press.

20-CD-2 THE ELICITATION OF COGNITIVE COPING IN THREE-YEAR OLD NURSERY SCHOOL CHILDREN

Purpose: To discover what areas of nursery school, which toys, or types of equipment serve as stimuli to elicit cognitive coping among three-year old children during free play periods.
Subjects: 20 three-year old nursery school children, aged 36 to 43 months.
Methods: Observation utilizing technique of psychological ecology with specimen descriptions of subjects' activities. Ecology of each child's activities during free play period is plotted on a prepared map in reference to time spent in each area. Specimen descriptions are coded for analyses according to predetermined "cognitive coping" categories.
Duration: October 1965-May 1966.
Investigator(s): Vladimir de Lissovoy, Ph.D., Associate Professor of Child Development and Family Relationships, Pennsylvania State University, University Park, Pa.
Publication: To be submitted to Child Development.

20-CD-3 RELATIONSHIP OF MOTHERS' LANGUAGE STYLES TO THE COGNITIVE STYLES OF URBAN PRESCHOOL CHILDREN

Purpose: To develop language style scales for analysis of language styles of mothers of differing social class groups; to assess social class differences in mothers' language styles; and to analyze relationship between mothers' language styles and their children's cognitive styles and I.Q.'s.
Subjects: 160 Negro mothers and their four-year old children.
Methods: Language samples are obtained from two projective tests given mothers, mothers' language in teaching their children a simple task, and mothers' account of a "typical day". Language scores derived from these samples are correlated with children's cognitive styles, using a cognitive sorting task developed by Kagan, Moss, and Sigel, and with the children's Stanford-Binet I.Q.'s.
Duration: September 1964-September 1965.
Investigator(s): Ellis G. Olim, Ph.D., Hampshire House, University of Massachusetts, Amherst, Mass.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-CG-1 CENTER FOR RESEARCH AND DEVELOPMENT FOR LEARNING AND RE-EDUCATION

Purpose: To improve the efficiency of learning in school and informal situations; to increase knowledge about cultural deprivation and problems of re-education.

Subjects: Children and youth of school age; some adults.
Methods: Controlled experiments in university laboratories and schools; development and field testing of instructional procedures; dissemination through centers for observation, through conferences, teacher education programs, graduate programs.
Duration: September 1964-August 1973.
Investigator(s): Herbert J. Klausmeier, Ed.D.; Chester W. Harris, Ph.D.; and Julian C. Stanley, Ed.D., Professors of Educational Psychology; Burton W. Kreitlow, Ph.D., Professor of Adult Education, and Henry Van Engen, Ph.D., Professor of Mathematics; University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: All means of publication are anticipated: books, monographs, articles, newsletters, etc.

20-CG-2 DISCRIMINATION LEARNING IN CHILDREN

Purpose: To investigate discrimination learning and concept formation in children in order to discover the processes underlying such learning and the conditions which control their occurrence. Specifically, project is concerned with mediating processes and factors (developmental or external) which are related to their use.
Subjects: Children, ages five to 11.
Methods: Use of a two-choice, simultaneous discrimination problem and transfer problems involving similar problems (similar in methodology though not necessarily similar with respect to actual stimuli).
Findings: Mediation has been found in discrimination learning of young children. Extent and perhaps even occurrence of mediation has been found to be governed more by external stimulus conditions than by developmental factors.
Duration: October 1964-September 1967.
Investigator(s): Peter D. Eimas, Ph.D., Assistant Professor of Psychology, Williams College, Williamstown, Mass.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Experimental Child Psychology, in press; additional articles are planned to be submitted to same journal.

20-CG-3 PAIRED-ASSOCIATES LEARNING IN CHILDREN

Purpose: To explore parameters of paired-associates learning; to develop word association norms for consonant-vowel-consonant (CVC) stimulus words; and to develop word-association norms for primaries elicited by CVC's.
Subjects: Fourth, sixth, and eighth grade boys and girls: approximate ages 9 to 10, 11 to 12, and 13 to 14.
Methods: Anticipation procedure used on paired-associates list, variables explored being patterns of pairings, exposure times, length of list, initial associative strength between words, grade level, and sex. Multiple word associations were taken to develop indexes of meaningfulness as well as associative strength.
Findings: Significant effects found for length of list, initial associative strength, exposure times.
Duration: September 1964-September 1966.
Investigator(s): Sydelle Stone Shapiro, Ph.D., Research Associate, Austen

Riggs Center, Stockbridge, Mass.
Cooperating group(s): Elementary schools of Dalton, and Pittsfield, Mass.; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results in Technical Reports 1-4 available from author. Also published in *Psychonomic Science*; *Child Development*, June 1966.

20-CG-4 LANGUAGE HABITS IN SERIAL VERBAL LEARNING

Purpose: To investigate effects of serial position within a list upon relative ease of memorizing a list of words, with variation in degree to which the list approximates a sentence. Also of interest are any differences in ease of learning different parts of speech.
Subjects: 54 subjects each from fourth, seventh, and tenth grades and college.
Methods: Learning by method of serial anticipation; 15-word lists of three levels of approximation to sentence word-order; presentation of material at a two-second rate to a learning criterion of one perfect anticipation of the list.
Duration: June 1965-May 1966.
Investigator(s): William E. Simpson, Ph.D., Assistant Professor of Psychology, Albion College, Albion, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned for *Journal of Verbal Learning and Verbal Behavior*.

20-CG-5 THE RELATIONSHIP BETWEEN MANIFEST RIGIDITY AND LANGUAGE LEARNING UNDER TWO DIFFERENT SYNTACTIC RULE SYSTEMS

Purpose: To discover possible relationship between two structural systems, cognitive organization (manifest rigidity) and linguistic structure (syntactic rules).
Subjects: 68 high school senior girls.
Methods: Subjects were divided into high and low rigidity according to test results (Braen's Manifest Rigidity Inventory). The two groups were subdivided and randomly assigned to two groups which were required to do syntactic exercises (substitutional and transformational rules were employed). Experimental language used was Swahili. Experimental design was based on a complete analysis of variance, 2 x 2 factorial.
Findings: No statistical significance was reflected in differences between manifest rigidity and rule-learning behavior even though F approached significance in a positive direction. Significant trends were revealed when specific syntactic rules were analyzed, especially with reverse order and compound rules, pointing the way to further research endeavors in this field.
Duration: September 1963-August 1964.
Investigator(s): Rudolph F. Wagner, M.A., Chief Psychologist, Richmond Public Schools, Administration Building, 809 E. Marshall St., Richmond, Va. 23219; and James N. Mosel, M.A., Professor of Psychology, George Washington University, Washington, D. C.
Publication: Mimeographed report.

20-CG-6 NEUROLOGICAL FINDINGS AND SPECIFIC LEARNING DEFICITS IN PRESCHOOL CHILDREN

Purpose: To test the hypothesis that a carefully defined pediatric neurological examination of the preschool age group may correlate better with psychological examinations and that the presence of minor neurological abnormalities may correlate with specific learning deficits.
Subjects: 40 to 60 underprivileged children aged three to five years.
Methods: Coordinated medical, psychological, and educational evaluations. Based on both the absolute level of accomplishment and the measure of improvement, re-examination at end of experience is used to help determine whether neurological examination in preschool period is stable and reproducible and whether this examination correlates with psychological and educational measures.
Investigator(s): Patricia A. O'Connor, M.D., Assistant Professor of Maternal and Child Health, School of Public Health, and Assistant Professor of Pediatrics and Communicable Diseases, Medical School; Ralph M. Gibson, Ph.D., Assistant Professor of Psychology, Medical School; and M. Jane Schwertfeger, Assistant Professor of Education, School of Education, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-CG-7 SOCIAL-CLASS AND DEVELOPMENTAL DIFFERENCES IN THE ROLE OF LINGUISTIC STRUCTURES IN LEARNING

Purpose: To isolate sources of sentence facilitation of paired-associate learning in children; to assess relative magnitude of facilitation produced by verbal and pictorial conditions as a function of age and social class.
Subjects: More than 1000 kindergarten, first, third, and sixth grade pupils in lower class and middle class schools.
Methods: Paired-associates are presented by means of transparent slides in the case of verbal items and by means of movie film in the case of pictorial items by study-test methods.
Duration: August 1965-August 1967.
Investigator(s): William D. Rohwer, Jr., Ph.D., Assistant Professor of Education, 4313 Tolman Hall, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to appropriate journals.

20-CG-8 VERBAL MEDIATION IN CHILDREN'S RECALL

Purpose: To investigate developmental acquisition of a verbal-rehearsal strategy for memorizing items in a nonverbal, delayed serial recall task; to study the nature and utility of this strategy.
Subjects: Approximately 100 first-grade boys and girls.
Methods: Familiar objects are depicted on a screen and child is obliged to remember them in particular sequences. An observer lip-reads any detectable rehearsal of object names during a delay period prior to recall test. In a subsequent session, non-rehearsers are induced to rehearse via instructions.
Findings: Rehearsers recall better than non-rehearsers; non-rehearsers improve their recall if induced to rehearse, but nonetheless do not necessarily continue to rehearse when subsequently given option of abandon-

ing strategy.
Duration: October 1965-June 1966.
Investigator(s): John H. Flavell, Ph.D., Professor, Institute of Child Development, University of Minnesota, Minneapolis, Minn. 55455.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Child Development 37:2:283-299, June 1966.

20-CG-9 CONCEPT LEARNING AND RETENTION IN A SIMULATED CLASSROOM SITUATION

Purpose: To test assumption that children learn effectively through observation, and to learn how much is learned and retained by children who do not actively participate but merely observe learning of another child.
Subjects: Five groups each of third grade boys and girls selected from each of three I.Q. levels (high, medium, and low).
Methods: Each experimental group is composed of three subjects, one of whom learns a concept from an electronic teaching device while other two observe. One of two observing children is then tested on same apparatus under same procedure to obtain comparative estimates of amount learned through observation. Each of three subjects is returned individually to experimental setting 24 hours later to obtain comparative estimates of amount retained by means of a relearning procedure.
Duration: September 1964-October 1965.
Investigator(s): Ira J. Semler, Ph.D., Director of Research, Cedar Rapids Community School District, 346 2nd Ave., S.W., Cedar Rapids, Iowa.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-CG-10 CONDITIONAL DISCRIMINATION IN CHILDREN

Purpose: To investigate learning of conditional discriminations, transfer of conditional discrimination learning, and retention of conditional discriminations over time in children beginning at age three.
Methods: Major training techniques involve use of two-component training and several forms of conditional training. Transfer is investigated as well as effects of junk (everyday objects) cues and color and form patterns.
Investigator(s): Eugene S. Gollin, Ph.D., Chairman, Department of Psychology, Fels Research Institute, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CG-11 VERBAL MEDIATION IN CHILDREN'S BEHAVIOR

Purpose: To investigate joint effects of two experimental variables, degree of verbal response similarity and level of verbal pretraining, on performance in a motor paired-associate learning task.
Subjects: Children in kindergarten, elementary, and junior high school.
Methods: In four similar experiments, subjects learn names for visual stimuli, and either concurrently or subsequently, are required to learn button-pushing responses for the same stimuli.

Duration: January 1965-December 1966.
Investigator(s): Joan H. Cantor, Ph.D., Assistant Professor of Child Psychology, Institute of Child Behavior and Development, State University of Iowa, Iowa City, Iowa 52240.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CG-12 VICARIOUS ASSOCIATIVE LEARNING IN CHILDREN

Purpose: To investigate vicarious associative learning in fourth, fifth, and sixth grade children using verbal materials; and to investigate effects of length of training, presence or absence of external reinforcement, commonality of stimulus words, and peer status of vicar.
Methods: Subjects listen to one of their peers performing a paired-associate task or responding with associates to stimulus words, originality of these associates being an independent variable. Effects of vicarious experience are assessed in direct transfer, mediational, and associative interference situations. Three children's personality inventories, comprising a locus of control scale, a social desirability scale, and an intellectual achievement scale, are used to assess extent to which personality variables are of import in vicarious originality training.
Duration: 1964-1966.
Investigator(s): Seymore Simon, Ph.D., Associate Professor of Psychology, and Raymond Ditrichs, Ph.D., Assistant Professor of Psychology, Northern Illinois University, DeKalb, Ill. 60115.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CJ-1 AGE AND PATHOLOGY DIFFERENCES IN BENDER-GESTALT PERFORMANCE

Purpose: To compare Bender-Gestalt protocols of normal children, brain-damaged adults, and schizophrenic adults.
Subjects: 45 public school children, 39 brain-damaged adults, and 38 schizophrenic adults.
Methods: Bender-Gestalt protocols were analyzed by eight scales and two indices. Two general types of errors in Bender-Gestalt functioning were looked for: developmental and motivational errors.
Findings: Bender-Gestalt performances of children and brain-damaged adults were highly similar to each other, but unlike those of schizophrenic adults; children and brain-damaged adults made developmental errors, while the schizophrenics did not; schizophrenics did not make many errors of any kind.
Duration: July 1963-September 1965.
Investigator(s): Daniel Wile, Ph.D., Cowell Hospital, Berkeley, Calif. (Reported by Donald A. Shaskan, M.D., Chief, Mental Hygiene Clinic, Veterans Administration Hospital, 49 4th St., San Francisco, Calif.)
Cooperating group(s): Charles C. Havens Elementary School, Piedmont, Calif.; three Veterans Administration installations: San Francisco Mental Hygiene Clinic; Martinez Hospital; and San Francisco Hospital.
Publication: Doctoral thesis, University of California, Berkeley.

20-CJ-2 PSYCHOLOGICAL ASSESSMENT OF THE PRESCHOOL CHILD

Purpose: To examine clinical usefulness of new psychological instrument for assessing intellectual function.
Subjects: Children from following groups: severely retarded; organically impaired; deaf, mute, or bedridden; and culturally deprived.
Methods: The test is based on informational analysis of perceptual discrimination tasks and consists of form matching tasks made up of randomly generated forms of known information content. Subjects are to be followed for a five-year period to measure deterioration and validation by comparison with actual school performance and teacher ratings.
Findings: Test was found to be correlated with such tests of intelligence as the Peabody Picture Vocabulary Test and the Draw-a-Person; it was simple and rapid in administration; lower level simple enough for very young or very retarded; response required a simple motor act that can be performed by physically handicapped children.
Investigator(s): Leon A. Rosenberg, Ph.D., Instructor of Pediatrics and Medical Psychology, School of Medicine, Johns Hopkins University, Baltimore, Md. 21205.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-CJ-3 LONGITUDINAL CHANGES IN I.Q. BETWEEN GRADES THREE AND 11

Purpose: To investigate deviations in I.Q. scores which occur between grades three and 11.
Subjects: Original study (Bulletin 18, Research Relating to Children) contained 156 boys and 158 girls in public elementary schools. Eleventh grade sample to be collected in fall 1966 will be the survivors of original group.
Methods: Subjects were initially tested in third grade using the California short form Test of Mental Maturity, '50S Form. They were subsequently tested at two-year intervals as fifth and seventh grade pupils. Difference scores, both group and individual, were reported in addition to an analysis of variance and standard error of measurement of differences. Present study is a follow-up study and will add data from grade 11.
Duration: September 1958-July 1967.
Investigator(s): Carmen J. Finley, Ph.D., Director, Research and Data Processing; Jack M. Thompson, M.A., Director of Guidance; Albert Cognata, M.A., Guidance Consultant; and Lee Panttaja, M.A., Assistant Director, Research and Data Processing, Sonoma County Schools, 2555 Mendocino Ave., Santa Rosa, Calif.
Publication: To be submitted for publication when complete.

20-CJ-4 A CROSS-CULTURAL INVESTIGATION OF INTELLIGENCE TESTING

Purpose: To investigate relative usefulness of two intelligence tests in appraising intellectual status of children who have had little experience with tests; and to examine problems of testing children who are culturally very different from the test standardization groups.
Subjects: Ladino and Quiche Indian children in Guatemala highlands schools.
Methods: The Draw-a-Man Test and Raven Progressive Matrices were administered to children in two Guatemala schools; teacher ratings of intellectual abilities of pupils were obtained; and an analysis will be made of subjects' approach to test problems.

Duration: June-December 1965.

Investigator(s): Dale L. Johnson, Ph.D., Associate Professor, University of Houston; Douglass Price-Williams, Ph.D., Associate Professor; and Carmen A. Johnson, Ph.D. Candidate, Rice University, Houston, Tex.

Publication: Publication is planned within the next few months.

20-CJ-5 PIAGET'S TASKS: PERFORMANCE IN THE LIGHT OF CULTURAL EFFECTS AND INTELLIGENCE TEST SCORES

Purpose: To analyze what is required on Piaget's tasks, especially conservation tasks, which are coming to be widely used in research on development of reasoning; to follow up results obtained with these tasks with a sample of Chinese children in Hong Kong.

Subjects: 160 white American boys, 8 and 11 years old, with intelligence test scores ranging from 68 to 168 (California Test of Mental Maturity).

Methods: Subjects were in four groups: 8-year old, superior; 11-year old, dull; 11-year old, average; and 11-year old, superior. This arrangement allows a comparison of effects of M.A. and C.A. Tasks were of two types: conservation tasks, stemming from Piaget's stage of concrete operations, and a combinatorial task, from the stage of formal operations. In the Hong Kong study, these two types of tasks had been differentially linked with variations in schooling and intelligence test scores.

Findings: A lack of major difference between the two types of tasks in this sample of children. All tasks were equally linked to intelligence test scores, with correlations in the order of .4 and .5. Mental age overrides C.A., with no significant differences between dull 11-year olds and bright 8-year olds, matched by pairs for mental age. The results suggest an interaction between type of task and lack of schooling, with conservation tasks less affected by illiteracy.

Duration: August 1962-August 1965.

Investigator(s): Jacqueline Jarrett Goodnow, Ph.D., Assistant Research Professor, Department of Psychology, George Washington University, Washington, D. C. 20006.

Cooperating group(s): Montgomery County, Maryland School System; National Institute of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: Probably in Child Development.

20-CJ-6 IS INTELLIGENCE TESTING ENOUGH?

Purpose: To determine capacities in children beyond findings of intelligence tests.

Subjects: Sixth grade students in a private school.

Methods: Techniques for exploring unusual traits.

Duration: October 1965-June 1966.

Investigator(s): Elizabeth M. Junken, Ph.D., Director, Morrow Educational Center, Elisabeth Morrow School, 480 Next Day Hill Dr., Englewood, N. J.

20-CM-1 CONCEPT IDENTIFICATION OF AUDITORY DIMENSIONS AS A FUNCTION OF AGE AND SEX

Purpose: To focus on saliency of five different auditory dimensions in an attempt to examine the function of subject's sex and age in auditory Concept Identification.

Subjects: 200 male and female volunteer students between the ages of six and 18 years who performed on an auditory Concept Identification task.
Methods: Stimuli were presented through earphones worn by subject who sat in front of a panel with two response buttons with feedback light directly above each button. Subjects were told to place each stimulus into one of two categories by depressing a response button and that feedback lights would indicate correct response. The bileveled dimensions varied in the following manner: number, intensity, laterality, frequency, and duration.
Findings: Intensity was the most difficult dimension. Performance improved with age, although subjects in the 12-13-14 year old group in intensity condition made greater number of errors than both the younger and older groups. Males performed at significantly higher rate, with no difference in errors between the sex groups. Explanation of decrement in performance by the adolescent subjects was attempted.
Duration: March 1964-May 1966.
Investigator(s): Vladimir Pishkin, Ph.D., Chief Research Psychologist, Veterans Administration Hospital, 921 N. E. 13th St., Oklahoma City, Okla. 73104.
Publication: Plan to publish in *Journal of Experimental Psychology*.

20-CM-2 FACTORS IN YOUNG CHILDREN'S CONCEPT DEVELOPMENT

Purpose: To study factors governing acquisition of elementary concepts in young children, particular attention being given to influence of attendance in kindergarten in combination with nature of children's play activities at home and certain aspects of home environment that might be relevant to development of basic cognitive skills; also to examine relationship between this development and specific aspects of child's use of language.
Subjects: Children of kindergarten age, divided into a group attending kindergarten and a group not attending.
Methods: Changes in subjects' cognitive skills from pre- to post-test compared in both groups; changes found in both groups are further related to information on children's home experience and, for a subset of children, to performance on selected tasks and responses to questions administered at two or three times during period between pre- and post-test.
Duration: July 1965-December 1966.
Investigator(s): Joachim F. Wohlwill, Ph.D., Associate Professor of Psychology, Clark University, Worcester, Mass. 91610.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CM-3 THE ROLE OF VARIOUS RESPONSE SYSTEMS IN CONCEPTUAL MEDIATION

Purpose: To study response systems underlying abstraction and conceptual transfer, specifically, role of verbal as well as nonverbal "coding" responses in mediating equivalence, and facilitating transfer, between physically dissimilar stimuli.
Subjects: Preschool children.
Methods: Subjects are screened by special techniques for possession or nonpossession of middle-size concept, and are also assessed for general verbal-conceptual level. Matched subgroups of "no-concept" children are then subjected to various training procedures, differing in terms of instructional method and/or type of response "built-into" child to mediate middle-size concept. Subject's ability to transfer between diverse instances of middle-sizedness is then tested.

Duration: 1962-continuing.
Investigator(s): Albert J. Caron, Ph.D., Section on Personality, Laboratory of Psychology, National Institutue of Mental Health, Bethesda, Md. 20014.

20-CP-1 A STUDY OF THE ABILITY OF EIGHTH GRADE STUDENTS TO UTILIZE TWO DIMENSIONS OF THE GUILFORD STRUCTURE OF INTELLECT MODEL IN ORGANIZING INFORMATION THEY POSSESS

Purpose: To study performance of eighth grade pupils in divergent production of units and classes, convergent production, memory, cognition and evaluation of classes, and convergent production of units as these intellectual productions may be expected to occur in regular classroom instruction.
Subjects: 50 pupils in two classes at Nicholas Junior High School, Fullerton, Calif.
Methods: Measurement instruments were constructed using words and concepts elicited from subjects. Guilford's definitions of the "Operations" were used in designing instruments. Data were gathered in five testing sessions. In four sessions pencil and paper instruments were used. In the fifth session, all subjects were interviewed by college students.
Duration: February 1966-February 1967.
Investigator(s): Ida S. Coppolino, Ed.D., Professor of Education, California State College at Fullerton, Fullerton, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Findings will be submitted for publication in journals related to the psychology of learning and teaching.

20-CP-2 UTILIZATION OF AN INTRINSIC PROGRAM TO STUDY THE PROBLEM-SOLVING PROCESSES OF GIFTED AND AVERAGE HIGH SCHOOL PUPILS

Purpose: To utilize an intrinsic program to study differences between gifted and average high school pupils in their problem-solving processes as well as in their products as determined by gain scores.
Subjects: 60 gifted and average eleventh and twelfth grade pupils identified by means of the School and Ability Test and the Iowa Test of Educational Development. The two groups are selected by matching pairs on the basis of criterion test scores.
Methods: Experimental segment of the intrinsic program is concerned with locating periodicals in the University library. Cards are processed by each subject to collect data. t tests for correlated samples and Chi-square are used to test the hypotheses.
Duration: August 1965-July 1967.
Investigator(s): John P. Casey, Ed.D., Assistant Professor of Education, Southern Illinois University, Carbondale, Ill.
Cooperating group(s): Program Development for Gifted Children, State of Illinois.
Publication: A preliminary report on information processing theory in connection with intrinsic programming. Final reports will be given to the Office of the Superintendent of Public Instruction, State of Illinois, and Southern Illinois University.

20-CP-3 ERRORS AND DISCRIMINATION PERFORMANCE IN CHILDREN

Purpose: To investigate in young children effect on terminal accuracy of discrimination performance and on emotional behavior of different procedures designed to produce a difference in frequency of errors.
Methods: A free-operant discrimination procedure is used. With one group, many errors are expected; with another group, few errors. Differences between groups with respect to mean number of errors during two experimental sessions, mean number of errors during latter part of second session, and mean number of emotional behaviors (defined through use of checklist) during second session are all tested for significance through t tests.
Duration: February 1965-September 1966.
Investigator(s): Lawson H. Hughes, Ph.D., Assistant Professor and Research Associate, School of Education and Audio-Visual Center, Indiana University, Bloomington, Ind.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-CP-4 THE ANALYSIS AND SYNTHESIS OF PROBLEM-SOLVING BEHAVIOR

Purpose: To develop techniques for teaching children complex problem-solving skills.
Subjects: Four- to nine-year-olds.
Methods: Experimental.
Findings: Children can acquire skills beyond what could be predicted from developmental theory.
Duration: 1962-1968.
Investigator(s): Richard C. Anderson, Ed.D., Associate Professor, University of Illinois, Training Research Laboratory, 8 Lincoln Hall, Urbana, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: University of Illinois Training Research Laboratory Monographs 1:3-7; book in press.

Personality

20-DA-1 DISCRIMINATION BETWEEN DICHOTOMOUS PERSONALITY GROUPS AS DETERMINED BY HUMOR PREFERENCES

Purpose: To construct a humor preference inventory which will elicit humor judgments from selected subjects, and to employ this inventory in determining effectiveness of humor stimuli in discriminating between dichotomous groups of high school students.
Subjects: Two groups of students chosen by their teachers to fit prepared behavioral descriptions of conformist and nonconformist personality.
Methods: Humor preference inventory is first constructed, each item having demonstrated its discriminative effectiveness in several pretesting procedures. Each subject of two groups then responds to it by indicating which of two cartoons in each item he believes to be funnier. Appropriate statistical analyses are then employed to determine degree of difference between two groups' responses. Reliability of the subjects' humor preferences is then calculated.
Duration: July 1964-September 1965.

Investigator(s): Stanley L. Wenck, (Doctoral candidate, University of South Dakota), Department of Psychology, Ball State University, Muncie, Ind.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-DA-2 A STUDY OF SOME OF THE WAYS IN WHICH REJECTED CHILDREN BEHAVE

Purpose: To study behavior of rejected children; to determine effect of personal rejection in eliciting conformity; specifically, to determine whether heightened susceptibility to influence is limited to rejector-rejectee relationship or whether it extends to relationships with other (unfamiliar) persons as well; to gather data bearing on "personality" consequences of rejection (e.g., lowered self-esteem and motivation to ingratiate oneself).
Subjects: 72 male students randomly assigned to conditions in a 2 X 2 X 2 factorial design.
Methods: Each subject is given a certain experience -- either acceptance or rejection. He is then paired with a peer for a conformity task - either with same person or someone else. Judgments are given either publicly or privately. Three variables thus manipulated are experience of subject prior to taking part in conformity task, familiarity of peer judge, and publicity attending giving of judgments.
Duration: July 1965-June 1966.
Investigator(s): Joel M. Savell, M.A., Assistant Professor of Psychology, Alfred University, Alfred, N. Y. 14802.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-DD-1 DETERMINANTS AND CORRELATES OF DREAM CONTENT

Purpose: To gather the first set of normative data on childhood dream content obtained with electrophysiological techniques of dream detection; to assess the effects of an experimentally controlled presleep manipulation (violent vs. nonviolent film) upon such content; and to assess intellective and personality correlates of such content.
Subjects: 32 boys, ages 6 to 8 and 10 to 12.
Methods: Subjects slept two nights in the laboratory, with four REM-sleep-content-retrieval awakenings scheduled for each night.
Findings: Presleep viewing of a violent film reduced dream intensity in general and dream hostility in particular.
Duration: April 1965-April 1966.
Investigator(s): David Foulkes, Ph.D., Assistant Professor of Psychology, University of Wyoming, Box 3371, University Station, Laramie, Wyo. (Reported by R. H. Denniston, Ph.D., Director of Research Development, University of Wyoming.)
Cooperating group(s): National Science Foundation.
Publication: Report available on request to investigator.

20-DD-2 GENERATIONAL CHANGE: A STUDY OF CONFLICT, DIFFERENCE, AND CHANGE BETWEEN PARENTS', TEACHERS', AND HIGH SCHOOL STUDENTS' VALUES

Purpose: To determine in what areas adolescent rebellion does and does not occur, and the extent to which parents' and high school teachers' values are mutually supportive.

Subjects: Entire ninth and eleventh grades of one large city working class high school, their parents and teachers.

Methods: All three groups of subjects respond to a standardized instrument for measuring their values as selected from literature concerning adolescent subcultures (e.g., college and high school education, dating and marriage, automobiles, fighting, etc.) and organized around the constructed typology of deferred gratification pattern. These values are then measured by means of semantic differential. Analysis of means and standard deviations permits specification of differences and homogeneity of values in subcultures, such as male/female, grade levels in school, social class levels, etc.

Duration: Not reported-December 1966.

Investigator(s): Edward Z. Dager, Ph.D., Professor of Sociology, Purdue University, Lafayette, Ind.; and Glenn A. Harper, M.S., Professor of Sociology, University of Maryland, College Park, Md.

Cooperating group(s): Purdue Research Foundation.

20-DD-3 EFFECT OF EMOTIONAL CLIMATE OF THE HOME ON PERSONALITY DEVELOPMENT

Purpose: To determine interrelationships among parent personality characteristics and attitudes, and social climate of home, and influence of these factors on personality, social maturity, and intelligence of child.

Methods: Use of following instruments: Minnesota Multiphasic Personality Inventory, Parent Attitude Inventory, Parental Attitude Scale, Parent-Parent-Child Adjustment, Measure of Child Personality, Personality Rating, Stanford-Binet Intelligence Scale, and Vineland Social Maturity Scale.

Duration: 1963-not reported.

Investigator(s): Beverly D. Fowler, Ph.D., Associate Professor of Human Development and the Family, and Associate Director, School of Home Economics, University of Nebraska, Agricultural Experiment Station, Lincoln, Nebr.

Cooperating group(s): Cooperative State Experiment Station Service, U. S. Department of Agriculture.

20-DD-4 DEVELOPMENT OF CHANGES IN MODES OF EXPRESSING MOTIVES

Purpose: To develop methods for obtaining samples of expressions of motives (and criterion for inferring the developmental status of these motives from behaviors exhibited) with respect to three types of expressions: (1) motives expressed in physical activity (action-motoric); (2) motives expressed in fantasy and imaginal activity (fantasy); and motives represented abstractly and communicated verbally (verbal-representational). To study normal and deviant personality development in terms of certain expectations concerning development within and between modes of expressing motives.

Subjects: Hypoactive, hyperactive, and normal-active children at different ages.

Methods: For action-motoric expressions, the Miniature Situations Test; for fantasy expressions, the Structured Fantasy Test; for verbal-representational expressions, the Continuous Word Association Test and Structured Sentence Completion Test. General procedure involves eliciting these motive expressions in subjects ordered developmentally (e.g., young children vs. older children) and with respect to psychopathology representing deviations of modalities of motive expressions (e.g., hyperactive vs. hypoactive) and assessing these expressions according to three interdependent criteria, which have meaning developmentally: directness; control and delay; and social appropriateness.

Findings: Preliminary findings suggest support for some main hypotheses: action expressions characterize subjects with developmentally low standing, while fantasy and verbal-representational behavior characterizes more advanced subjects; also, there is a vicarious relationship among the three modalities.

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Duration: March 1965-June 1967.
Investigator(s): Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604.
Cooperating group(s): Clark University.
Publication: Findings to be published.

20-DD-5 SELF-CONTROL IN CHILDREN

Purpose: To study change in self-control as function of chronological age; to investigate certain major variables--sex, parental attitudes, and types of settings--previously suggested as major correlates of this development.
Subjects: 120 children between the ages of six and eight years, divided successively into age brackets of six months each with 15 boys and 15 girls in each bracket.
Methods: Recording of actual or reported behavior under four conditions: an isolated temptation situation, classroom situation, in presence of mother and two other adults, and mother's report of child's behavior; analysis of data according to age and sex of subjects and investigation made of similarities or differences found in various settings.
Investigator(s): Richard P. Walsh, Ph.D., Assistant Professor of Psychology, Southern Illinois University, Edwardsville, Ill. 62025.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-DD-6 NATIONAL SURVEY OF YOUTH

Purpose: To question representative samples of American youth periodically on issues germane to personality development in American society.
Subjects: A representative sample of boys and girls aged 13 to 16, residing in the contiguous states.
Methods: Survey interviews and tabulation of records kept by youth-serving and other agencies.
Duration: January 1966-December 1968.
Investigator(s): Martin Gold, Ph.D., Assistant Program Director, Research Center for Group Dynamics, Institute for Social Research, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles and monographs planned.

20-DG-1 THE INFLUENCE OF AGE AND INCENTIVES ON CHILDREN'S SELF-REWARD

Purpose: To investigate the effects of age, incentives, and class standing on frequency of self-reinforcement in children.
Subjects: In two experiments 543 children from second to eighth grade.
Methods: In experiment I, children in classes rewarded themselves for anticipating an E response correctly, when chances for successful guessing were near zero. Groups differed in rewards for "correct" guesses, yielding either points or candy. A third group first observed a model obtaining candy. In experiment II, self-reinforcement was taken by the child for correctly responding after a simple, partially learned visual discrimination task in individual sessions.
Findings: Younger children gave more inappropriate self-rewards, as did children who were rewarded with candy and those who observed a model's self-rewards. Children who were ranked in the lower half of their classes exceeded high ranking subjects in self-rewards in the candy and model groups. In experiment II, low ranking subjects performed equally well with high ranking

subjects, but took more undeserved self-rewards. Incorrect self-reinforcement correlated 0.45 in subjects who participated in both experiments.
Duration: Summer 1965-spring 1966.
Investigator(s): Frederick H. Kanfer, Ph.D., Professor of Medical Psychology, Medical School, University of Oregon, Portland, Oreg. 97201.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted for publication to *Psychological Reports*.

20-DJ-1 VALUES, STATUS, AND LEISURE TIME ACTIVITIES: A STUDY IN THE SOCIOLOGY OF ADOLESCENCE

Purpose: To study the relationship of values to leisure time activities in the adolescent subculture.
Subjects: All high school males in grades 10, 11, and 12 (ages 14 to 18) in two southern Indiana small towns.
Methods: Certain values were explored that have a specific effect on adolescent leisure time behavior, and others were delineated that have no effect on leisure time patterns. Values were measured according to the newest form of the Levy Modification of Allport-Vernon-Lindzey *Study of Values*. Status was investigated as a possible intervening variable using A. B. Hollingshead's *Two Factor Index of Social Position*. Leisure was studied through a specially constructed leisure time activities questionnaire.
Investigator(s): Patrick J. Hunter, S.J., Bellarmine School of Theology, Loyola University, 230 S. Lincoln Way, North Aurora, Ill. 60542.
Cooperating group(s): Society of Jesus, Ponchatoula, La. 70454.

Social

20-EA-1 PEER REINFORCEMENT: EMPIRICAL STUDIES

Purpose: To study the incidence of positive reinforcement occurring in child-child interactions in the nursery school; to examine these phenomena in relation to situational factors eliciting them, and their consequences; to study effects of reinforcement occurring in child-child dyads on social influences of a variety of kinds as measured in the laboratory.
Subjects: 85 three- to six-year olds enrolled in nursery school.
Methods: Observational techniques involving time-sampling and a variety of laboratory methods.
Findings: Individual differences in peer reinforcement are relatively stable; amount increases generally with age; amount of positive reinforcement is positively correlated with social acceptance; social acceptance is negatively related to performance-effects of a child's reinforcement in simple ambiguous tasks but status-competence of a reinforcing peer is positively related to his effectiveness as a reinforcing agent.
Duration: January 1965-indefinite.
Investigator(s): Willard W. Hartup, Ed.D., Professor of Child Psychology, Institute of Child Development, University of Minnesota, Minneapolis, Minn. 55455
Publication: *Journal of Experimental Child Psychology* 2:306-315, 1965; *Young Children* 20:176-184, 1965.

20-EA-2 ADULT SOCIAL FUNCTIONING RELATED TO CHILD DEVELOPMENT

Purpose: To learn whether patterns of social functioning attained in adulthood may be predicted from childhood behavior.

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Subjects: 134 individuals enrolled in the Longitudinal Study of Child Health and Development conducted by Dr. Harold C. Stuart at the Harvard School of Public Health. Subjects were followed periodically from birth to 18 years and are now between 25 and 34 years old.
Methods: Identification of consistencies and inconsistencies in behavior described in individual patterns of social functioning during adulthood in relation to those previously described during the postpubescence and the preschool periods; relating patterns of social functioning with patterns of physical changes.
Duration: January 1965-December 1968.
Investigator(s): Isabelle Valadian, M.D., Associate Professor of Maternal and Child Health; Ruth M. Butler, M.S., Research Associate in Social Work; and Robert B. Reed, Ph.D., Professor of Biostatistics, School of Public Health, Harvard University, 55 Shattuck St., Boston, Mass. 02115.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publications planned in 1968.

20-EA-3 A COMPARATIVE ANALYSIS OF TEENAGERS' PROBLEMS AND ADJUSTMENT PATTERNS, 1942-46 AND 1962-66

Purpose: To determine differences between problems and adjustment patterns and associational processes of high school students in comparable communities over a period of two decades. Some reference to regional differences, class differences, age and sex differences is indicated in the measurements.
Subjects: Roughly 1,500 boys and girls from three different comparable types of communities in the earlier sample from Georgia and Michigan and a similar sample from Florida and North Carolina for more recent sample.
Methods: Questionnaires were verified by interviews and group discussions, then coded and processed with data processing units for 1962-66 sample, and certain data compared with findings of crude percentages arrived at through hand tabulations from the 1942-46 sample.
Duration: 1962-1968.
Investigator(s): Melvin J. Williams, Ph.D., Chairman, Department of Sociology and Anthropology, East Carolina College, Greenville, N. C.
Publication: Roughly one-third of findings of earlier study have previously been published in Social Forces and in a Florida State University Monograph.

20-EA-4 AN EXPERIMENTAL ANALYSIS OF CHILD-CHILD INTERACTIONS

Purpose: To assess peer reinforcement influence on the free-field social behavior of preschool children.
Subjects: Kindergarten children in groups of three and groups of 10 to 15.
Methods: Naturalistic observation combined with experimental techniques. One child is observed with peers until stable picture is obtained of child's behavior and contingent behaviors of his peers. Then peers are instructed (through instructions and imitation sessions with experimenter) to ignore one of child's response classes. Observational methods then used to assess effect of experimental intervention.
Findings: Peers may function as powerful reinforcement agents for a number of typical child social behaviors.
Duration: June 1965-August 1966.
Investigator(s): Robert G. Wahler, Ph.D., Assistant Professor of Psychology, University of Tennessee, Knoxville, Tenn. 37916.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Intend to submit to *Journal of Experimental Child Psychology*.

20-EA-5 GROUP NORMS IN CLASSROOMS OF CONTRASTING SOCIO-ECONOMIC STATUS AND DIFFERING RACIAL COMPOSITION

Purpose: To discover correlates of popularity in classrooms of differing socio-economic level and racial compositions.
Subjects: Four groups of three sixth grade classrooms each providing subjects in four categories: Caucasian "core culture", Negro "core culture", Caucasian lower class, and Negro lower class.
Methods: Each subject completes a reputation test, measuring degree to which each child is seen by peers as having certain traits and characteristics. One item provides a measure of each child's popularity. By correlating children's scores on measured traits and characteristics with scores on popularity, it is possible to determine relationship of these traits and characteristics to popularity. Influence of sex on correlates of popularity is assessed by analyzing data separately for sex of children as raters and sex of children rated. Analysis of variance and factor analysis techniques are used to assess differences in correlates of popularity among combinations of race, socio-economic status, sex of raters, and sex of those being rated.
Duration: March-December 1964.
Investigator(s): Richard W. Brozovich, M.A., Department of Psychology, George Peabody College for Teachers, Nashville, Tenn. 37203.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-EA-6 SOCIAL REINFORCEMENT IN A NATURAL SETTING

Purpose: To test effects of adult social reinforcement on child behavior in a nursery school group.
Subjects: Four-year old child having difficulty in relations with peers and teachers.
Methods: Experimenter systematically applied positive reinforcements following acceptable social behavior and ignored unacceptable behavior. Data on peer reinforcements were also collected.
Findings: There was an increase in frequency of approved and a decrease in frequency of disapproved acts. High degree of agreement was reached between two sets of behavioral observations made, one by observers uninformed as to hypothesis, and other by informed observer. It was impossible to separate reinforcing and inhibiting properties of adult, and consequently, to interpret process by which behavior was modified.
Duration: Completed.
Investigator(s): Phyllis M. Scott, Ph.D., Visiting Fellow; Roger V. Burton, Ph.D., Research Psychologist; and Marian R. Yarrow, Chief, Section on Developmental Psychology, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

20-ED-1 PREMARITAL SEX ATTITUDES, VALUES, AND BEHAVIOR PATTERNS IN MINNESOTA

Purpose: To study attitudes, values, and behavior patterns in regard to premarital sex; to investigate weaknesses and strengths in communities of the state related to implementation of programs designed to reduce incidence of illegitimate births.
Methods: Field work involving visits to four communities in Minnesota to observe community life and to interview youth and adults; interviews with all unwed mothers coming to Lutheran Social Service of Minnesota during 1965; and analysis of dating histories of several hundred recent high school graduates.
Duration: June 1964-June 1966.
Investigator(s): Floyd M. Martinson, Ph.D., Professor of Sociology, Gustavus Adolphus College; and James K. Merrill, Director, Division of Child Welfare, Lutheran Social Service of Minnesota, St. Peter, Minn.

20-EG-1 A CROSS-CULTURAL STUDY OF SMOKING BEHAVIOR AND RELATED VARIABLES FOR STUDENTS ATTENDING EIGHT HIGH SCHOOLS IN ARIZONA

Purpose: To study inter-ethnic differences in factors (values, attitudes, parental and peer influences, etc.) related to development of smoking behavior among samples of high school youth in southern Arizona; to recommend specific changes or additions to existing programs of smoking education based upon findings.
Subjects: Approximately 8,000 high school students drawn from samples of "Anglo," Mexican-American and Indian groups in eight high schools in southern Arizona.
Methods: Questionnaire and interview data.
Duration: August 1964-August 1968.
Investigator(s): Salvatore V. Zagona, Ph.D., Associate Professor of Psychology, University of Arizona, Tucson, Ariz.
Cooperating group(s): National Clearinghouse for Smoking and Health, Division of Chronic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Preliminary findings in Research Reports, Vol. III, National Research Conference on Smoking Behavior, University of Arizona, March 30-April 1, 1966. Copies available upon request. Formal journal publication of findings presently in preparation.

20-EG-2 EPIDEMIOLOGICAL STUDY OF THE USE OF BEVERAGE ALCOHOL AMONG DELINQUENT AND NONDELINQUENT ADOLESCENTS

Subjects: 500 delinquent and 3,400 nondelinquent male adolescents.
Methods: Collection of data on subjects and coding and punching on IBM cards; testing against both samples of a series of correlates wherein primary dependent variable is a newly developed typology.
Duration: January 1964-December 1967.
Investigator(s): Harold W. Demone, Jr., Ph.D., The Medical Foundation, Inc., 227 Commonwealth Ave., Boston, Mass.
Cooperating group(s): United Health Foundation, Inc.

20-EJ-1 SEX AND AGE SOCIAL SCHEME IN CHILDREN, ADULTS, AND SCHIZOPHRENICS

Purpose: To examine effects of an individual's own age and sex position on his use of age and sex dimensions in categorizing other people.
Subjects: Eight age-sex groups of three-year old males and females, five-year old males and females, nine-year old males and females, adult males and females, and 15 poor premorbid and 15 good premorbid schizophrenics from the Brockton Veterans Administration Hospital.
Methods: A booklet containing 20 sets of pictures will be administered to groups of subjects. Each page will contain pictures of four people who differ in terms of sex and age, e.g., man-boy vs. woman-girl. Subject's task is to group figures into two groups with two figures in a group by drawing lines between figures felt to belong together. Subjects may classify each page of figures in one of three ways: (1) an age categorization (e.g., boy-girl vs. man-woman), (2) a sex categorization (e.g., man-boy vs. woman-girl), and (3) a mixed categorization (e.g., man-girl vs. woman-boy). Short post-test questionnaire will be administered to determine subject's phenomenal basis of classification for each group of pictures.
Duration: March-September 1965.
Investigator(s): Harry L. Julia, M.A., Social Psychology Trainee, 141 Carlton St., Brookline, Mass. 02146.
Cooperating group(s): Veterans Administration.

Physical handicaps

20-FA-1 EPIDEMIOLOGY OF CONGENITAL DEFECTS IN A VERMONT COUNTY

Purpose: To study prevalence of congenital defects in a cohort of 1,813 live births in a Vermont County over a 12-year period; to determine pattern of defects, who discovered them, when and what methods of medical care were provided for them.
Subjects: Entire liveborn population of Chittenden County, Vermont during 1952.
Methods: Cohort analysis of population with family questionnaire, record tracing, hospital and crippled children's analysis, follow-up of state health department records, etc.
Duration: June 1964-June 1965.
Investigator(s): Roger J. Meyer, M.D., and Richard Wulf, M.D., Associate Professors, Pediatrics and Preventive Medicine, School of Medicine, University of Virginia, Charlottesville, Va.
Cooperating group(s): State of Vermont Health Department; University of Vermont.
Publication: New England Journal of Medicine, April 26, 1966.

20-FA-2 CHARACTERISTICS OF MULTIPLY IMPAIRED STUDENTS

Purpose: To ascertain the incidences and combinations of multiple handicaps in children with severe visual impairment under 21 years of age in the United States; to define further needs and areas of research as a result of these findings particularly in terms of future educational program planning, curricular methodology, and recommendations for teacher-training courses.
Subjects: Any child in the U. S. between the ages of 5 and 21 who has at

least one additional handicap besides blindness or severe visual impairment. Methods: A survey-questionnaire form was devised and sent to state departments of education, residential schools for the blind, special schools, institutions for the mentally retarded, local school districts, and public and private agencies.
Duration: November 1965-December 1966.
Investigator(s): Milton D. Graham, Ph.D., Director, American Foundation for the Blind, 15 W. 16th St., New York, N. Y. 10011.
Publication: A report of the survey findings will be made available.

20-FD-1 THE CLINICAL APPLICATION OF FILTERED ENVIRONMENTAL SOUNDS FOR THE ASSESSMENT OF HEARING IN CHILDREN

Purpose: To refine assessment of hearing in young children who are unable to conform to routine formalized hearing testing procedures.
Subjects: 20 normal hearing children and 20 children with high frequency hearing loss; two similar groups of adults.
Methods: Establish threshold of awareness for experimental sounds in each of the filtered bands and threshold for pure tones 500, 1,000 and 2,000 Hz; compare thresholds using statistical tests.
Findings: There appears to be close agreement between threshold of awareness for majority of filtered sounds and corresponding pure tone. Some sounds do not lend themselves to this procedure.
Duration: Fall 1964-January 1967.
Investigator(s): Earl Harford, Ph.D., Associate Professor of Audiology and Director, Hearing Clinics, and Anita Bellmann, M.A., Associate Director, Hearing Clinics, Northwestern University, Evanston, Ill. 60201.
Publication: To be submitted to Journal of Speech and Hearing Disorders.

20-FD-2 VOICE DISORDERS IN SCHOOL AGE CHILDREN

Purpose: To determine prevalence of voice disorders in children; to study methods of therapy.
Subjects: Children, aged five to 21 years, in public and private schools of Metropolitan St. Louis.
Methods: Survey for detection and complete evaluation of child--medical, psychological, and acoustic.
Duration: April 1966-April 1969.
Investigator(s): Frank B. Wilson, Ph.D., Director of Speech Pathology, Jewish Hospital of St. Louis, 216 S. Kingshighway, St. Louis 10, Mo.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-FD-3 DIAGNOSIS OF CEREBRAL DYSFUNCTION IN CHILDREN: A 10-YEAR FOLLOW-UP

Purpose: To provide adjustment data after 10 years on group of patients originally seen in a child guidance clinic; to see if adjustment after 10 years differs for the two groups of children in original study: a group with abnormal EEG's and consistent signs of brain dysfunction, and a group with normal EEG's and negative in tests for brain dysfunction.
Subjects: Follow-up of 108 young adults, male and female, now 17 to 25 years of age, from an original group of 150 patients seen in 1955-1957.
Methods: Evaluation of current adjustment based on questionnaire and

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rating scale completed by parent(s) and rated by a psychiatrist and two psychologists as indicative of "average adjustment" or "poor adjustment", and the Minnesota Multiphasic Personality Inventory completed by each subject and results rated by three psychologists as indicative of "average adjustment" or "poor adjustment".
Findings: Slightly over half of subjects considered to be making an adequate adjustment; trend for children with cerebral dysfunction to have a higher proportion of maladjustment than those who showed little or no dysfunction and for those subjects originally rated as normal neurologically to have the most abnormal appearing MMPI profiles.
Duration: September 1964-February 1966.
Investigator(s): Leo J. Hanvik, Ph.D., Clinical Assistant Professor of Psychology, Medical School, University of Minnesota, 901 Utah Ave. S., and Child Clinical Psychologist, and Carol M. Kaste, B.A., Clinical Psychologist, Washburn Memorial Clinic, Minneapolis, Minn.
Publication: Presented at XVIIIth International Congress of Psychology.

20-FD-4 SURVEY OF NEUROLOGICAL AND PSYCHOLOGICAL FACTORS ASSOCIATED WITH RETROLENTAL FIBROPLASIA IN SCHOOL-AGE CHILDREN IN NORTH CAROLINA

Purpose: To survey children with retrolental fibroplasia in the Governor Morehead School (formerly State School for the Blind), Raleigh, N. C. If possible, survey will be extended to include children not enrolled in Governor Morehead School, but in the population of other state agencies, particularly schools for the retarded.
Subjects: 54 children in the residential school for the blind.
Methods: Each child is examined by a neurologist and EEG's are taken. When abnormalities are noted, re-examinations and additional EEG readings are made. A battery of psychological tests, including the six verbal subtests of the WISC, and a few selected items from the HAPTIC Intelligence Test for the Blind (not standardized for this age population but used to survey performance ability) is administered; measures of mannerisms, space orientation and mobility, fantasy life, and dreams are also taken. School grades and achievement tests scores are included.
Findings: Findings tend to substantiate several other surveys using EEG's on this population which revealed no significant or consistent patterns of neurological abnormalities in the group as a whole.
Duration: 1965-1967.
Investigator(s): George Paulson, M.D., Neurologist, North Carolina Department of Mental Health; and Rachel F. Rawls, M.S., Director of Research, The Governor Morehead School, Raleigh, N. C.
Cooperating group(s): Dorothea Dix Hospital; The State Commission for the Blind, Raleigh, N. C.
Publication: Article submitted to North Carolina Medical Journal.

20-FD-5 "MINIMAL CEREBRAL DYSFUNCTION SYNDROME": EVALUATION OF DIAGNOSTIC CRITERIA

Purpose: To evaluate significance of physiologically determined neurological deficits in certain behavioral manifestations, i.e., certain neurological signs, hyperactivity, and learning problems in children with minimal cerebral dysfunction.
Subjects: An experimental group of 25 children between five and nine years old, who have been referred to the Neurology Clinic because of learning or behavioral problems, and a control group of 25 normal children between ages of five and nine years, who have not been reported to have learning and behavioral problems.

Methods: Neurological examination, EEG, psychological and language testing (including the Bender Visual Motor Gestalt, The Illinois Test of Psycholinguistic Abilities, Templin Darley Test of Articulation, Peabody Vocabulary Test, Stanford-Binet Form L-M).
Findings: A specific type of EEG abnormality has been frequently found in patients with specific defects which would be basic to learning and behavioral problems.
Duration: January 1965-January 1966.
Investigator(s): Robert N. Pavy, M.D., Chief, and Jean Metcalfe, Ph.D., Speech Pathologist, Division of Neurology, San Mateo County General Hospital, 222 W. 39th Ave., San Mateo, Calif.
Cooperating group(s): Association of Neurologically Handicapped.

20-FD-6 MOTOR IMPAIRMENT IN SCHOOL CHILDREN

Purpose: To validate and standardize the Gollnitz revision of the Oseretsky Test of Motor Ability.
Subjects: Randomized samples of school children aged five to 15 years throughout Britain.
Methods: Regular procedures for item-improvement and validation, and test-standardization.
Duration: January 1965-September 1968.
Investigator(s): Denis H. Stott, Ph.D., Lecturer, Department of Psychology, University of Glasgow, Glasgow, W.2, Scotland.
Cooperating group(s): Spastics Society; Scottish School of Physical Education.
Publication: Publication planned in appropriate journals.

20-FD-7 AN INPUT-OUTPUT APPROACH TO PSYCHODIAGNOSIS IN CHILDREN

Purpose: To relate empirical findings with a theoretical model for psychodiagnosis in children.
Subjects: Over 200 children from pediatric and crippled children's services, and referrals from private practice.
Methods: Use of WISC ratios and ratios based on intertest comparisons, e.g., arithmetic on WISC and arithmetic on WRAT.
Findings: Significant differences in vocabulary input-output with borderline children.
Duration: September 1965-summer 1967.
Investigator(s): Luciano L'Abate, Ph.D., Professor of Psychology, Georgia State College, 33 Gilmer St. S.E., Atlanta, Ga. 30303.
Cooperating group(s): Child Development Laboratory and Institute for Psychological Services, Inc., Georgia State College.
Publication: Paper read at meeting of Southern Psychological Association, New Orleans, April 1, 1966.

20-FG-1 10-YEAR STUDY OF BRAIN-DAMAGED CHILDREN

Purpose: To study in a longitudinal fashion the emotional development of children who have been seen as patients in a community mental health center and whose condition was diagnosed as Chronic Brain syndrome.
Subjects: 13 children who were diagnosed as brain-damaged in 1955 following a study by psychologists, social workers, and psychiatrists in a

psychiatric out-patient clinic. Of the 40 children in the original study, 13 are currently available for restudy.
Methods: Intensive interview by a social worker with parents to determine current functioning; psychological testing and psychiatric and neurological examinations; electroencephalographic testing; data from examinations and interviews to be included in report along with analysis of these data.
Duration: June 1956-October 1966.
Investigator(s): Albert E. Rauh, M.D., Staff Psychiatrist; Milton C. Baumann, M.D., Medical Director; C. R. Dickson, M.A., Psychologist; Thomas C. Bergin, M.S.W., Psychiatric Social Worker; and Fred A. Ludwig, M.S.W., Psychiatric Social Worker and Executive Director, Mental Health Association, 1300 S. 7th St., Springfield, Ill. 62703.
Cooperating group(s): Springfield Chapter, American Business Club.
Publication: The report will be published privately and will be available for distribution at a small cost.

20-FG-2 THE EFFECTS OF SYMPTOM ON THE CHILD

Purpose: To examine, across clinical groups, differential effects of cleft palate, asthma, congenital and traumatic amputation, and obesity.
Subjects: 50 cleft lip, 50 cleft palate, 50 cleft lip and palate, 50 asthmatic, 50 traumatic amputees, 50 congenital amputees, and 50 obese children, all between ages 11 and 17.
Methods: Questionnaires and self-rating scales.
Duration: December 1965-June 1967.
Investigator(s): Edward Clifford, Ph.D., Assistant Professor of Medical Psychology, Medical Center, Duke University, Durham, N. C. 27706.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication through available professional journals.

20-FG-3 A DEVELOPMENTAL STUDY OF CEREBRAL PALSIED INFANTS

Purpose: To assist in evaluation of an infant rehabilitation program.
Subjects: 50 children under two years of age in a rehabilitation program at the North Carolina Cerebral Palsy Hospital.
Methods: Subjects are examined on admission to program on the Vineland Social Maturity Scale and the Cattell Infant Intelligence Scale. They are re-examined at three-month intervals or longer, on the Cattell Infant Scale. Plans are made for re-evaluation of subjects on the Vineland Social Maturity Scale at yearly intervals.
Findings: Very little change in intelligence quotient has been noted during the past two years.
Duration: Fall 1963-1968.
Investigator(s): Katharine M. Banham, Ph.D., Associate Professor of Psychology, Duke University, Durham, N. C. 27706.
Cooperating group(s): Mary M. Huse, Ph.D., Psychologist, Department of Psychiatry, Duke University School of Medicine.

20-FG-4 THE ASSESSMENT OF THE WRITTEN LANGUAGE OF DEAF STUDENTS

Purpose: To describe the written language of deaf students, and to

establish a test instrument with national norms.
Subjects: 900 deaf subjects, ages 10 to 18 years, selected from national population by stratified random sampling procedures.
Methods: Multiple-regression equations were developed for each age, 10 to 18; six variables (grammatic correctness, composition length, sentence length, type-token ratio, utilization of parts of speech, spelling) served as predictors, and teacher judgment served as criterion.
Findings: Grammatic correctness, type-token ratio, and composition length share approximately 75 percent of variance of teacher judgment.
Duration: September 1964-May 1966.
Investigator(s): E. Ross Stuckless, Ph.D., Assistant Professor, University of Pittsburgh, Pittsburgh, Pa. 15213; and Claude Marks, Ed.D., Assistant Professor, University of Texas, Austin, Tex.
Cooperating group(s): 14 residential and day schools for the deaf; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report to be submitted to Office of Education.

20-FG-5 PSYCHOLINGUISTIC METHODS IN THE CLASSIFICATION OF APHASIA

Purpose: To ascertain changes that occur in linguistic structure with age and maturation; to provide a normative base of lexical frequency of use in relatively free speech for comparison with pathological groups such as children with delayed development of language--brain-injured children, mentally retarded children, Negro vs. white children, etc.; to determine whether and at what point children develop the same frequency characteristics as adults.
Subjects: 30 children at each age level from 5 through 13.
Methods: A verbal corpus is collected from each child by means of story telling to twenty cards of the TAT. Each word is coded for part of speech and a computer program organizes the relative frequency of use of each word, both as a separate lexical unit and as a part of speech. Further analysis of the corpus is planned on sentence units used, remnant of words used in other than communication units, and phrases and clause analysis.
Duration: November 1964-October 1967.
Investigator(s): Joseph M. Wepman, Ph.D., Professor, Departments of Surgery and Psychology, and Wilbur Haas, Ph.D., Assistant Professor of Psychology, University of Chicago, 5848 S. University, Chicago, Ill. 60637.
Cooperating group(s): School systems in Newton, Mass. and Niles and Flossmoor, Ill.; Universities of Florida and Washington; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Possibly a monograph on children's use of language; if not, a series of journal articles on the differences between normal and pathological development of language.

20-FG-6 RESEARCH IN PEDIATRICS

Purpose: Studies in juvenile diabetes mellitus.
Subjects: Juvenile diabetics and their families (parents and siblings).
Methods: Longitudinal study both with regard to medical aspects, and also to growth and physical and emotional development. Emotional development is studied by a psychiatrist (interviews with child, parents and siblings), and psychologist (I.Q., MMPI, etc.) to determine extent of interference with development by problems of the disease.
Duration: December 1965-indefinite.
Investigator(s): John A. Birkbeck, M.B., CH.B., Department of Pediatrics,

University of British Columbia, School of Medicine, Vancouver, B. C.
Cooperating group(s): Vancouver Foundation; Canadian Diabetic Association; Government of Canada Maternal-Child Health Grant.
Publication: Publication pending (hopefully in Diabetes).

20-FG-7 GROWTH STUDIES OF CHILDREN WITH OPERABLE CONGENITAL HEART DISEASE

Purpose: To evaluate developmental status of children prior to corrective open heart surgery, and to make longitudinal postoperative observations at semi-annual and annual intervals which document postsurgical progress.
Subjects: 1,059 examinations made on 255 children.
Methods: Basic data, collected and analyzed according to standard methods described in Bayer and Bayley, Growth Diagnosis, include five anthropometric measurements, five body shape indices, and four photographs. A simultaneous X-ray of the left hand and wrist is assessed for skeletal age. These parameters are plotted comparatively against appropriate norms for both chronological and skeletal age peers in terms of standard deviations from the means. The photographs give additional evidence concerning body configuration. Morphologic observations are correlated with medical, cardiac, neurologic, and ophthalmologic findings.
Findings: Children with congenital cardiac anomalies tend to be smaller than their normal peer population and are retarded in skeletal age and in "shape age." Before cardiac surgery, growth patterns of girls indicate a trend toward the normal status earlier than those of boys. After corrective open heart surgery, groups of boys and girls appear to be slightly closer to their respective normal peers than before. The shift is not as great as might be anticipated. The overall growth pattern of children with operable congenital heart disease tends to be one of retardation rather than of dwarfism.
Duration: July 1962-1969.
Investigator(s): Leona M. Bayer, M.D.; Saul J. Robinson, M.D.; Robert W. Popper, M.D.; John J. Osborn, M.D.; Frank Gerbode, M.D.; and J. A. G. Russell, M.A., Heart Center, Presbyterian Medical Center, San Francisco 15, Calif.

20-FG-8 OBSERVATIONS OF COPING METHODS USED BY CHILDREN WITH CYSTIC FIBROSIS

Purpose: To document methods of coping utilized by preschool children with cystic fibrosis, and by their mothers.
Subjects: 22 children ages two to five years, with cystic fibrosis, and their mothers.
Methods: Three home visits are made to each family by a trained observer with previous experience in home observations. The first visit introduces the parents to the study; the second visit is before, during, and after mealtime; the third is before, during, and after physical therapy (aerosol and postural drainage). Detailed descriptions are written by one or two observers and evaluated by nonobservers for coping techniques employed by parents and children.
Duration: June 1964-September 1966.
Investigator(s): A. Scott Dowling, M.D., Instructor in Child Psychiatry, University Hospitals, Cleveland 6, Ohio.
Cooperating group(s): Departments of Pediatrics and Psychiatry, Western Reserve University School of Medicine.

20-FG-9 A MODEL FOR INVESTIGATING THE RELATIONSHIP OF UNISENSORY AND CROSS-MODAL PERCEPTION WITH CERTAIN EGO FUNCTIONS

Purpose: To develop a series of measures which would prove feasible in use with brain-injured subjects for the purpose of determining relative perceptual competence of subjects in employment of selected sensory modalities, and degree to which integration of sensory experience from several modalities has developed; to apply selected measures of ego function and explore relationships obtaining between ego tests and measures of perceptual competence.
Subjects: Small group of brain-injured children, ages 6 to 12.
Findings: Integration of perceptual experience correlates positively with level of ego function.
Duration: 1964-June 1966.
Investigator(s): Helen First (Ph.D., Candidate), Department of Education and Child Development, Bryn Mawr College, Bryn Mawr, Pa. (Reported by Rachel Dunaway Cox, Ph.D., Chairman, Department of Education and Child Development, Bryn Mawr College.)
Cooperating group(s): The Vanguard School, Haverford, Pa.
Publication: The report will be available on microfilm at Bryn Mawr College Library. Author will answer inquires directed to her through the Department of Education and Child Development of Bryn Mawr College.

20-FG-10 A STUDY OF THE PSYCHOLOGICAL ASPECTS RELATED TO ENDOCRINE DISORDERS IN CHILDHOOD

Purpose: To clarify the impact of the endocrine system on the mental apparatus.
Subjects: Children with precocious puberty, and dwarfism.
Methods: Simultaneous biochemical and psychological data are correlated and integrated. Psychiatric interviewing is chief source of psychological data.
Findings: Precocious puberty results in prerature closure of the ego defenses. Dwarfism's impact is correlated both with the height abnormality and with the type of dwarfism involved.
Duration: 1958-indefinite.
Investigator(s): Marvin B. Krims, M.D., Staff Psychiatrist, Children's Hospital Medical Center, 300 Longwood Ave., Boston, Mass.
Publication: Journal of American Academy of Child Psychiatry 1:3, July 1962. Another article submitted for publication.

20-FG-11 FOLLOW-UP STUDY OF PATIENTS WHO HAVE RECOVERED FROM LEGG-PERTHES DISEASE

Purpose: A study to determine adjustment and development of patients five to 10 years after discharge from hospital: (a) impression of their long term hospital stay; (b) emotional adjustment after a period of regression; (c) ego development; and (d) development of character traits.
Methods: Interviews with former patients and their parents; interview with teachers and review of school records; interview with employers (if any).
Duration: May 1966-May 1968.
Investigator(s): Alan Tomashefsky (M.D. Candidate), and Thesi Bergmann, M.A., Instructor in Child Therapy, Department of Child Psychiatry, School of Medicine, Western Reserve University, Cleveland, Ohio.

20-FG-12 IDENTIFICATION OF ORIENTATION AND MOBILITY SKILLS RELATING TO DEVELOPMENTAL TASKS FOR YOUNG BLIND CHILDREN

Purpose: To identify the essential orientation and mobility skills for young blind children.
Methods: A scale of essential skills is being developed using developmental data based on normal children, related research studies, and observations of experienced teachers. A jury will assist with scaling and judging the significance of the skills.
Duration: July 1965-June 1966.
Investigator(s): Francis E. Lord, Ph.D., Professor, Special Education Center, California State College, 5151 State College Dr., Los Angeles, Calif. 90032.
Publication: Preliminary Scale: September 1966; Revised Scale: July 1967.

20-FG-13 NEUROBIOLOGIC-SOCIOPSYCHOLOGIC CORRELATION OF CLINICAL SEQUELAE WITH BRAIN INJURY CAUSED BY VIRUSES, EXTRACORPOREAL CIRCULATION, OR HYPOTHERMIA

Purpose: Earlier studies of principal investigator have demonstrated that permanent injury to the brain resulting in variable symptoms and signs might be caused by viral-central nervous system illnesses in infancy or early childhood. Study attempts to correlate clinical findings with known risks of brain injury, and to evaluate results in light of hypothesis that maturation potentialities of the brain were impaired. It is proposed that other causes of brain injury may also impair cerebral ontogenesis.
Subjects: Approximately 200 children who have had viral-CNS illnesses (in most instances of laboratory-confirmed etiology) and 200 children with congenital heart defects who undergo surgery with outside circulatory aids and low temperature.
Methods: Children are studied neurologically and psychologically at regular intervals. Those in heart surgery study are examined before and after operation. Some children have been followed for periods up to 13 years. Clinical findings are evaluated statistically and qualitatively to determine their relationship to such factors as age at onset, severity of illness, type of illness, length of circulatory aid, degree of hypothermia.
Findings: For the viral encephalitis group, age at onset appears to be most significant variable in determining presence and severity of sequelae. The younger the patient at time of illness, the greater the likelihood of severe sequelae. To date, cardiovascular surgical experience has rarely resulted in any adverse neurologic and behavioral symptoms and signs.
Duration: 1952-continuing.
Investigator(s): Knox H. Finley, M.D., Director; Philip R. Calanchini, M.D., Assistant Director; and Marjorie P. Honzik, Ph.D., Consultant Psychologist, Institute of Neurological Sciences, Presbyterian Medical Center, Clay and Webster Streets, San Francisco, Calif. 94115.
Cooperating group(s): Association for the Aid of Crippled Children; California State and local Departments of Public Health; National Institute of Neurological Diseases and Blindness and National Heart Institute, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Article submitted for publication; others planned.

20-FG-14 DIFFERENCES IN VERBAL INPUT-OUTPUT IN LABORATORY PSYCHODIAGNOSIS OF CHILDREN

Purpose: To study relationship of Peabody Picture Vocabulary I.Q. (input) to WISC Vocabulary I.Q. (output) with physical setting, diagnosis, and achievement in reading.
Subjects: Drawn from various pediatric, psychiatric and crippled patients.
Methods: Statistical analysis (analysis of variance) to find significance of differences between means.
Duration: October 1965-indefinite.
Investigator(s): Luciano L'Abate, Ph.D., Professor of Psychology, Georgia State College, 33 Gilmen St., S.E., Atlanta, Ga. 30303.
Cooperating group(s): Department of Pediatrics, School of Medicine, Emory University; Crippled Children's Service, Georgia Health Department.
Publication: Pre-publication: Bulletin of the Child Development Laboratory, Georgia State College.

20-FG-15 PSYCHOLOGICAL EFFECTS OF CEREBRAL LESIONS IN CHILDREN

Purpose: To investigate effects on abilities of unilateral cerebral lesions, anterior vs. posterior cerebral lesions, age of onset of cerebral dysfunction, and duration of cerebral dysfunction; to compare groups of children with well-defined cerebral lesions with groups identified as minimally brain-damaged and with groups of mentally retarded children without known cerebral lesions; and to investigate age-related changes in effects of cerebral lesions on abilities.
Subjects: Brain-damaged and nonbrain-damaged children ranging in age from five through 14 years.
Methods: Two batteries of psychological tests, based on procedures devised by Halstead, have been specifically developed for collecting data on subjects.
Duration: September 1959-August 1967.
Investigator(s): Ralph M. Reitan, Ph.D., Professor of Psychology (Neurology) and Director, Section of Neuropsychology; and Robert F. Heimburger, M.D., Professor of Surgery and Director, Section of Neurological Surgery, Medical Center, Indiana University, 1100 W. Michigan St., Indianapolis, Ind. 46207.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

20-FG-16 PSYCHOLOGICAL AND EDUCATIONAL STUDIES WITH SPINA BIFIDA CHILDREN

Purpose: To assess educational attainment of a group of 125 spina bifida children and the intellectual, perceptual, neurological, social, and rehabilitation correlates of these attainments; to determine the nature and incidence of educational problems in this group of children.
Subjects: Approximately 125 children with spina bifida and myelomeningocele. Control groups of normal and other disabled children.
Methods: Data gathered from parents, teachers, and children; wide variety of tests: achievement, intellectual, perceptual, learning, and personality.
Duration: October 1965-September 1968.
Investigator(s): Leonard Diller, Ph.D., Chief, Behavioral Sciences, Institute of Physical Medicine and Rehabilitation, New York University Medical Center, 400 E. 34th St., New York, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned.

20-FJ-1 CHILDREN'S LOWER-EXTREMITY ORTHOTICS PROBLEMS

Purpose: To initiate a long-term study of the development and treatment of lower-extremity orthotics problems in children. Evaluation of disability and its changing manifestations is being used as a basis for scientific design of corrective devices and for development of corrective procedures.
Subjects: 59 children from 18 months through 16 years with disorders including: pes planus, internal and external rotation deformities of the leg, talipes equinovarus, pes cavus, metatarsus adductus, drop foot, genu valgum, and multiple foot deformities associated with cerebral palsy.
Methods: Standardized methods have been adopted for obtaining motion, still, and X-ray pictures of lower extremities, as well as for measuring and recording axes of rotation of joints. Obtained at regular intervals and compared, records will provide a basis for comparison and evaluation of treatment methods. In addition, these data can be used to determine effects of growth on disability.
Findings: UC-BL Shoe Inserts and the UC Dual-Axis Ankle-Control System (short leg brace) are of value both for amelioration of the symptoms and for assisting in correction of the deformity in certain types of children's orthotics problems.
Duration: August 1964-indefinite.
Investigator(s): Verne T. Inman, M.D., Ph.D., Professor and Chairman, Department of Orthopedic Surgery, and Chairman, Biomechanics Laboratory; and William H. Henderson, B.S., Associate Orthotics Staff Specialist, School of Medicine, University of California, San Francisco, Calif.
Cooperating group(s): Veterans Administration; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Technical reports in preparation.

20-FJ-2 A KINESTHETIC APPROACH FOR THE PERCEPTUALLY HANDICAPPED

Purpose: To evaluate effect of kinesthetic materials and methods in educational progress of the perceptually handicapped child.
Subjects: 20 students in primary department of Bryan School for Handicapped Children.
Methods: Frostig, Montessori, and other materials of an objective nature are used; kinetic methods include games and exercises to strengthen tactile senses, spatial recognition, and development.
Findings: Observations, visual and tactile, are improved. Comprehension through kinesthetic sense improved other sense areas.
Duration: 1965-1966.
Investigator(s): Ann Reid, Ph.D., Coordinator of Special Education, and Elizabeth Bethell, M.A., Classroom Instructor, Oklahoma City Schools, Oklahoma City, Okla.
Cooperating group(s): Child Study Center.

20-FJ-3 EVALUATING AND TREATING CHILDREN WITH MINIMAL BRAIN DAMAGE FROM A COMBINED NEUROLOGICAL AND PSYCHOLOGICAL POINT OF VIEW

Purpose: To develop individual psychological and neurological methods of assessment (e.g., EEG, neurological responses, perceptual-motor tests), and to establish how these various individual measures might be combined to make maximal predictions and decisions about the minimally brain damaged child; to explore various treatment modalities (e.g., psychopharmacological drugs and prescribed psychological-cognitive exercises) best suited for children differentially diagnosed.

Subjects: All children referred to the Child Development Center of the Worcester Youth Guidance Center.
Methods: Tests of cognitive style, EEG, neurological responses, perceptual-motor tests.
Duration: May 1965-June 1967.
Investigator(s): Manuel Gil, M.D., Head, Child Development Center, and Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604.
Cooperating group(s): Worcester State Hospital; Clark University.

20-FJ-4 EFFECT OF GROUP EXPERIENCE ON HANDICAPPED CHILDREN

Purpose: To demonstrate a method for improving mental health of orthopedically handicapped children--participation of handicapped children in socio-recreational groups with nonhandicapped children; and to demonstrate that the method can be implemented through use of existing community centers.
Subjects: 300 elementary school age, handicapped children of both sexes, residing in New York City.
Methods: Subjects are randomly assigned to one of three treatment conditions - control, segregated, or integrated groups and remain in treatment for two years, with a post-treatment follow-up for two years. Instruments to detect changes in adjustment in personality and overt behavior are employed in a "before-and-after" design. Data thus collected are subjected to statistical analysis to test for significant differences among three treatment subgroups. Additional data are collected to determine whether community centers are effective resources for implementation of integrated group method.
Duration: Not reported-April 1968.
Investigator(s): Harold W. Robbins and Carl F. Wells, Ph.D., New York Service for Orthopedically Handicapped, 853 Broadway, New York, N. Y. 10003.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-FJ-5 VALIDITY OF FIVE-YEAR PROPHYLAXIS IN NONCARDIAC RHEUMATICS

Purpose: To investigate validity of discontinuation of prophylaxis in the noncardiac rheumatic patient after a five-year period.
Subjects: Patients who had no evidence of heart disease at time of original illness had five years of prophylaxis, and have had five years without prophylaxis or unusual medical care; patients who had evidence of rheumatic heart disease at time of original illness had five years of prophylaxis, had no evidence of heart disease at end of five-year period, and have had five years without prophylaxis or unusual medical care.
Methods: Quantitative information will be sought through cardiac and physical examination and documentation of interval histories. Specific points for quantitation are: comparative rate of rheumatic recurrences for two age groups; rate of rheumatic recurrences in patients who had carditis with their primary attack and in those who did not; incidence of carditis with post-discontinuation recurrences; incidence of chronic rheumatic heart disease and fatalities; incidence of recurrences in patients with family history of rheumatic fever and in other high risk groups.
Duration: 1966-1971.
Investigator(s): Peter Vlad, M.D., Associate Professor; Dorothy Ehmke, M.D., Assistant Professor; and Denise Huff, M.D., Fellow in Cardiology,

Department of Pediatrics, University of Iowa, Iowa City, Iowa 52241. Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-FP-1 THE IMPACT OF THE BIRTH OF A CLEFT LIP-CLEFT PALATE BABY

Purpose: To examine effect of birth of a cleft palate child on parents. Subjects: 100 pairs of parents of cleft lip-cleft palate children under the age of two.
Methods: Questionnaires and personality rating scales.
Duration: December 1965-June 1967.
Investigator(s): Edward Clifford, Ph.D., Assistant Professor of Medical Psychology, Medical Center, Duke University, Durham, N. C. 27706.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Through available professional journals.

Mentally gifted

20-GA-1 SOME RELATIONSHIPS BETWEEN INTELLIGENCE AND CREATIVITY IN GIFTED ADOLESCENTS

Purpose: To explore psychometric characteristics of four groups of subjects. These groups are defined by independent measures of intelligence and creativity.
Subjects: To be selected from approximately 1,100 high school students who have attended the Governor's School of North Carolina, a residential summer program.
Methods: By the use of the Terman Concept Mastery Test as a measure of intelligence and the Revised Art Scale of the Welsh Figure Preference Test as an objective measure of creativity, it is possible to form four independent groups: (1) high on intelligence but low on creativity; (2) high on creativity but low on intelligence; (3) high on both; and (4) low on both. Standard tests and teachers' ratings are dependent variables.
Duration: September 1965-July 1966.
Investigator(s): George S. Welsh, Ph.D., Professor of Psychology, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Richardson Foundation, Greensboro, N. C.

20-GA-2 THE RELATIONSHIPS BETWEEN CERTAIN TEACHER CHARACTERISTICS AND ACHIEVEMENT AND CREATIVITY OF GIFTED ELEMENTARY SCHOOL STUDENTS

Purpose: To investigate relationships between certain teacher characteristics and changes manifested by classes of gifted elementary students in convergent and divergent thinking areas.
Subjects: Students and teachers of 38 self-contained intermediate elementary gifted classes located throughout North Carolina.
Methods: Prior to school year, teacher characteristics were assessed through use of Personal Data Questionnaire, California Test of Mental Maturity, and the 16 Personality Factor Questionnaire. Students were

pretested in the fall and post-tested in the spring to assess growth in six convergent production areas. Sequential Tests of Educational Progress and Minnesota Tests of Creative Thinking will be employed. A series of multiple regression equations will be computed to identify those teacher variables that significantly (.01 level) influence class changes in each of the convergent and divergent areas.
Duration: 1965-1967.
Investigator(s): Marvin Gold, Ph.D., Assistant Professor, Education for the Gifted, Division of Special Education and Rehabilitation, Syracuse University, Syracuse, N. Y. 13210; and Shirley R. McNary, M.A. (formerly Graduate Student, Syracuse University), 12 S. Frederick Ave., Gaithersburg, Md.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Mentally retarded

20-HA-1 SOCIO-BEHAVIORAL STUDY CENTER FOR MENTAL RETARDATION RESEARCH

Purpose: To determine ways of studying prognosis of the mentally retarded individual in his development as related to institutional life, interaction with family, and with the larger social structure.
Subjects: Mentally retarded children and adults in hospital and community.
Methods: In the hospital various methods are applied in an epidemiological investigation of treatment programs, patient morbidity and mortality, program evaluation, and physiological and growth abnormalities. In the community, methodology is directed toward location and identification of the mentally retarded and comparison of retarded with normal population.
Duration: October 1964-September 1971.
Investigator(s): Harvey F. Dingman, Ph.D., Program Director, Socio-Behavioral Laboratory, Pacific State Hospital, Pomona, Calif.; and George Tarjan, M.D., Professor of Psychiatry, School of Medicine and School of Public Health, University of California at Los Angeles, Los Angeles, Calif.
Cooperating group(s): Health Sciences Computing Facility, University of California at Los Angeles; California State Department of Mental Hygiene; Western Interstate Commission for Higher Education; and Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Approximately 100 articles published; many others in progress. Reprints available on request.

20-HA-2 REGIONAL COOPERATION IN MENTAL RETARDATION DATA COLLECTION AND RESEARCH IN WESTERN UNITED STATES

Purpose: To collect data on residents of western state institutions for mentally retarded; to stimulate and facilitate mental retardation research.
Subjects: All residents of all state institutions for the retarded in the 13 western states.
Methods: Standard population census form is completed for each resident by ward level personnel at state institutions.
Duration: June 1965-December 1966.
Investigator(s): Dan Payne, M.A., Co-Director, Western Interstate Commission for Higher Education, University East Campus, 30th St., Boulder, Colo. (Reported by Robert H. Kroepsch, Director, Western Interstate Commission for Higher Education.)

Cooperating group(s): 19 western state institutions; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Data will be provided on request.

20-HD-1 DIFFERENTIATION OF ORGANIC EDUCABLE MENTALLY RETARDED CHILDREN FROM NON-ORGANIC ON THE MINNESOTA PERCEPTO-DIAGNOSTIC TEST

Purpose: To develop a more refined scoring system for the MPD Test than exists at present in hopes to increase its discriminative validity as an index of brain damage in the mentally retarded.
Subjects: 36 brain-damaged and 36 nonbrain-damaged educable retarded children on which additional diagnostic signs have been developed. A cross-validation sample will consist of approximately 60 subjects in each group.
Findings: Two new diagnostic signs, separations and loss of gestalt, have been added to the rotational score of the MPD Test which together identified 86 percent of the brain-damaged educable retarded subjects. Subjects are now being tested to cross-validate these initial findings.
Duration: September 1965-August 1966.
Investigator(s): Gerald B. Fuller, Ph.D., Director of Clinical Research, Willmar State Hospital, Willmar; and Alastair Burnett, Ph.D., Chief Psychologist, Owatonna State School, Owatonna, Minn.
Publication: To be submitted to the *Journal of Clinical Psychology*.

20-HD-2 DEVELOPMENTAL DIAGNOSTIC STUDIES IN MENTAL DEFICIENCY

Purpose: To provide a qualitative analysis of developmental defect; specifically, the standardization and extension of the developmental evaluative techniques of Else Haeussermann; and psychophysiological studies of behavioral disturbances implicated in developmental failure with emphasis on parameters derived from the area of classical conditioning.
Subjects: Normal neonates and those with suspected brain damage; retarded children and those with psychiatric disturbances; siblings of patient groups; normal school children.
Methods: Standardization of Haeussermann Test involves determination of age values for each test item; codifying administration and interpretation of test; and extension of test to age range below two years. The psychophysiological studies concern performance of patient and normal children in studies of autonomic conditioning, motor conditioning, and word association. Behavioral and autonomic measures in response to stimulation are also being obtained in neonates in an attempt to identify early signs of cerebral defect.
Duration: September 1964-August 1967.
Investigator(s): Joseph Wortis, M.D., Director, Division of Pediatric Psychiatry, Jewish Hospital of Brooklyn, 555 Prospect Pl., Brooklyn, N. Y. 11201.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results to be published in medical and psychological journals as data are analyzed.

20-HD-3 REFINING OF URINE SCREENING TEST FOR CHONDROITINS

Purpose: To evaluate validity and precision of various procedures for determination of urinary mucopolysaccharides; to search for mentally retarded individuals with concurrent presence of enormous excretion of mucopolysaccharides, in whom the disease has not been previously described; and to gain further knowledge and understanding on pathology and therapeutic treatments of patients with Hurler's syndrome.
Subjects: Patients with clinically confirmed Hurler's syndrome and those nonambulatory and severely mentally retarded.
Methods: Determinations of mucopolysaccharides are performed on urine of individuals with Hurler's syndrome, with and without therapeutic treatment, and of those without Hurler's syndrome. Procedures used include toluidine blue staining spot test, hexuronic acid by carbazole test, acid albumin turbidimetric test (done on both dialyzed and undialyzed specimens), gross acid albumin turbidity test (brief observation of the turbidity appeared after mixing the acid albumin reagent and the undialyzed urine at acidic pH), and urine (dialyzed and hydrolyzed) reducing power.
Findings: Preliminary results indicate that both the toluidine blue staining spot test and the gross acid albumin turbidity test appear to be satisfactory for screening; the former requires a longer time and tends to have more false positive results than latter.
Duration: April 1964-March 1967.
Investigator(s): Charles H. Carter, M.D., Medical and Research Director, Sunland Hospital, Box 3513, Orlando, Fla. 32802.

20-HG-1 CASE RECORD ANALYSIS

Purpose: To determine some of the characteristics of retarded children attending one of the first retardation clinics in the country.
Subjects: 500 children, a random sample of one-third of all cases served in the Division of Pediatric Psychiatry in first ten years of its existence; subjects are primarily retarded children, but other psychiatric disorders are included as well.
Methods: Preparation of a method of case record analysis, including decisions on categories of information to be abstracted from record and preparation of coding sheets; selection of sample and abstracting of data; transfer of information to data cards; analysis of data.
Findings: Most retarded children served are in "moderate" category or below (I.Q. of 50 or less). While patients are drawn from all social classes, there is some evidence that low social class is under-represented. Encephalopathy of unknown cause, mental retardation of unknown cause, and Down's syndrome are most frequently diagnosed.
Duration: September 1957-August 1965.
Investigator(s): Joseph Wortis, M.D., Director, Division of Pediatric Psychiatry, and Helen Wortis, M.S., Research Associate, Jewish Hospital of Brooklyn, 555 Prospect Pl., Brooklyn, N. Y. 11201.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: "Families With Two or More Mentally Retarded or Mentally Disturbed Siblings: The Preponderance of Males" accepted for publication in *American Journal of Mental Deficiency*; other publications planned; mimeographed reports available.

20-HG-2 A COMPARATIVE ANALYSIS OF THE NATURE OF EDUCABLE MENTALLY RETARDED ADOLESCENTS' EXPRESSED LEVEL OF UNDERSTANDING OF SELECTED OCCUPATIONS

Purpose: To investigate the nature of educable mentally retarded adolescent children's expressed level of understanding of selected occupations as compared to intellectually normal children of comparable general chronological and mental ages; to investigate relationships between the expressed level of understanding of selected occupations by adolescent mentally retarded children and their own chronological and mental ages.
Subjects: 50 adolescent educable mentally retarded junior high school students enrolled in the public school program in cities in Northern Illinois; 50 adolescent intellectually normal junior high school students in the public schools; and 50 intellectually normal elementary school students enrolled in the public schools.
Methods: All subjects were interviewed in two, 45-minute interviews regarding their understanding of 14 selected occupations representing seven occupational areas--commercial, personal service, agriculture, mechanical, professional, esthetic, and scientific. Specific occupations selected for the areas were secretary, insurance salesman, cook, barber, dairy farmer, poultryman, automobile mechanic, carpenter, dentist, teacher, actor, musician, pharmacist, and weatherman. Pictures of persons engaged in each of the selected occupations were shown to subjects prior to interview to ascertain that each subject could identify the occupation. School records were examined for data regarding ability, parent occupation, and date of birth.
Findings: Levels of understanding of educable mentally retarded adolescents and intellectually normal children of comparable general chronological age did differ significantly. Levels of understanding of educable mentally retarded adolescents and intellectually normal children of comparable general mental age did differ significantly. Levels of understanding of educable mentally retarded adolescents among the seven major areas of occupations did differ significantly. There were no significant differences in relationships among expressed levels of understanding of educable mentally retarded adolescents for each of seven major areas of occupations and their own chronological age. Relationship between level of expressed understanding of adolescent educable mentally retarded subjects and their mental age was significant in occupational areas of agriculture, mechanical, and esthetic. There were no significant relationships established for other areas.
Duration: January 1965-January 1966.
Investigator(s): Elmer J. Kuhn, Ed.D., Assistant Professor of Education, Northern Illinois University, DeKalb, Ill. 60115.
Publication: Doctoral dissertation, Michigan State University, E. Lansing, Michigan. Soon to be submitted for publication.

20-HG-3 AN INVESTIGATION OF THE DEVELOPMENT OF SOCIAL BEHAVIORS IN RETARDED CHILDREN

Purpose: To investigate some variables which influence development or lack of development of social behaviors in autistic and retarded children.
Subjects: Residents of the Children's Colony at Coolidge, Arizona, including those with autistic schizophrenia, brain damage and other forms of retardation.
Methods: Operant conditioning procedures are used to explore possibility of shaping social behaviors in children whose social repertoires are limited. In particular, cooperative response as defined by Azrin and Lindsley is studied. Variables such as amount, kind, and schedule of social reinforcement and their effects on development of cooperative and other social responses are studied.

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Duration: June 1965-fall 1966.
Investigator(s): Ralph J. Wetzel, Ph.D., Assistant Professor of Psychology, University of Arizona, Tucson, Ariz.
Cooperating group(s): Arizona State Department of Health.

20-HG-4 PILOT STUDY: ASSESSING NONVERBAL DIVERGENT THINKING IN RETARDED CHILDREN

Purpose: To determine whether, and in what ways, a newly developed nonverbal test of divergent thinking might discriminate between the performance of a group of educable mentally retarded children and a group of nonretarded regular grade children of comparable age.
Subjects: 42 educable mentally retarded children from special classes in a public school system and 42 nonretarded regular grade children ranging in intelligence from average to superior, with chronological ages between 9-1/2 and 10-1/2.
Methods: Test of certain factors in nonverbal divergent thinking (Tangram Test) administered individually to each subject; photographic technique used for recording subjects' productions.
Findings: On measure of ideational fluency, scores of retarded and normal subjects did not differ significantly. Differences in ideational flexibility were highly significant, favoring the normal group. Elaboration scores were significantly higher for retarded subjects. However, this difference was not paralleled by a superiority in originality, for normal subjects also scored significantly higher in this area.
Duration: April 1965-continuing.
Investigator(s): George Brabner, Jr., Ph.D., Associate Professor of Education, and Benson Becker, Research Assistant, Ferkauf Graduate School of Education, Yeshiva University, New York, N. Y. 10003.
Cooperating group(s): Northern New Jersey Public School Systems.
Publication: To be submitted to *Exceptional Children* or *American Journal of Mental Deficiency*.

20-HG-5 DIRECTIONALITY AND OCULAR-MANUAL LATERALITY IN EDUCABLE MENTAL RETARDATES

Purpose: To determine relationships among various measures of ocular-manual laterality, directionality, and achievement.
Subjects: Approximately 40 educable mental retardates from Johnstone Training and Research Center.
Methods: Each is administered tests of handedness, eyedness, directionality (Road Map Test), following directions (Wells Concrete Directions), and achievement (Wide Range Achievement). Results are analyzed by intercorrelations to determine relationships among variables.
Duration: March 1966-August 1966.
Investigator(s): Rudolph J. Capobianco, Ed.D., Research Scientist, Edward R. Johnstone Training and Research Center, Bordentown, N. J. 08505.
Publication: To be submitted to an appropriate professional journal.

20-HG-6 A STUDY OF SELF-AWARENESS IN GROUP WORK WITH ADOLESCENT RETARDATES

Purpose: To investigate various facets of self-awareness within a group work counseling setting of adolescent retardates; to investigate parental attitudes and their relation to self-awareness in the retardate.
Subjects: 12 adolescent male and 12 adolescent female retardates.

Methods: Measures of self-concept as well as measures of intelligence and personality; parental attitude measures; process recordings of group discussions analyzed for content relating to above areas.
Duration: 1965-1966.
Investigator(s): Alan Barclay, Ph.D., Associate Professor of Psychology, Department of Pediatrics, and A. Thaman, M.S.W., Chief Social Worker, Child Development Clinic, St. Louis University, St. Louis, Mo.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted to American Journal of Mental Deficiency.

20-HG-7 LONGITUDINAL STUDY OF NUTRITIONALLY DEPRIVED AND ENRICHED MENTAL RETARDATES

Purpose: To determine whether growth phenomenon is specific to normals alone.
Subjects: 5,500 retardates and control population matched by ages.
Duration: May 1966-1971.
Investigator(s): Charles C. Cleland, Ph.D., Associate Professor, and Ralph Hanna, M.D., Assistant Professor, Department of Special Education, University of Texas, Austin, Tex. 78712.

20-HG-8 STUDY OF ACTIVE THOUGHT ORGANIZATION IN RETARDATES

Purpose: To explore whether approaching mental retardates from conceptual framework of developmental psychology leads to a more fruitful examination of differences and similarities between retardates and normals.
Subjects: Retardates and normals matched for M.A.
Methods: Tests of visual perception, touch, and smell are being developed, yielding efficiency scores in each of these areas.
Duration: March 1965-June 1966.
Investigator(s): Samuel E. Stayton, Ph.D., Staff Psychologist, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604. (Reported by Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center.)
Cooperating group(s): Worcester Area Comprehensive Care Center for the Mentally Retarded.

20-HG-9 PROBLEM BEHAVIOR IN RETARDED AND DISTURBED ADOLESCENTS

Purpose: To develop a reliable means of describing and communicating the problem behavior patterns of atypical (i.e., retarded, brain damaged, schizophrenic, behavior disordered) adolescents, and to assess relationships that may exist between these behavior patterns and a variety of demographic and historic information.
Methods: Factor analytic and other multivariate methods are employed in defining behavioral factors and patterns in atypical adolescents and in a normal group. Test-retest reliability as well as more long-term stability of scores will be assessed. The latter also allows an initial glimpse at the prognostic utility of different behavior patterns.
Duration: July 1965-June 1967.
Investigator(s): George Spivack, Ph.D., Director of Research, and Jules Spotts, M.A., Research Psychologist, Devereux Schools, Devon, Pa.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

20-HG-10 VERBAL AUDITORY SCREENING OF THE MENTALLY RETARDED

Purpose: To investigate a suitable method of testing the hearing of severely retarded children; to determine incidence of hearing loss among institutionalized retarded children.
Subjects: 252 retarded children at Faribault State School and Hospital, ages five to 16.
Methods: THE VERBAL AUDITORY SCREEN FOR CHILDREN (VASC), a speech audiometer, was used to test the hearing of these retarded children.
Findings: Depending on criterion, retarded children had from two to six times as great a percentage of hearing loss as normal children. The VASC was found to be useful in detecting hearing impairment among institutionalized mentally retarded children. Hearing evaluation required about five minutes, and children with as low as thirty months M.A. could be tested satisfactorily.
Duration: December 1962-December 1965.
Investigator(s): Stuart Dansinger, M.A., School Psychologist, Board of Education, Duluth; and Arnold A. Madow, Chief Psychologist, Faribault State School and Hospital, Faribault, Minn.
Publication: Paper in press.

20-HH-1 CLIMATOLOGICAL INFLUENCES IN RETARDATION

Purpose: To investigate relationship between season of conception and subsequent birth of mental defectives; to assess possible differential influence of season of conception upon institutionalized retardates ordered along the parameters of ethnicity, level of retardation, sex, and education level of parents.
Subjects: Total resident population in the Special Schools (institutional) in Texas. (N = 11,000)
Methods: Epidemiological analysis of the birth dates of retardates for the past 25 years in the State of Texas.
Findings: More retarded children seem to have been conceived, relative to expectation based upon the Texas live birth rate, in the hotter months of the year, this effect being heightened in Latin Americans. Seasonal variations in month of birth among retardates also show wide differences with respect to parent education level.
Duration: June 1965-November 1965.
Investigator(s): Ira Iscoe, Ph.D., Professor of Psychology; Charles C. Cleland, Ph.D., Associate Professor of Special Education; and William F. Patton, M.A., Research Associate, Vocational Rehabilitation Administration Research and Training Center, University of Texas, Austin, Tex. 78712.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Submitted to psychological journals.

20-HJ-1 EFFECTS OF TRAINING PROCEDURES ON VISUAL DISCRIMINATION LEARNING AND TRANSFER IN RETARDED AND NORMAL CHILDREN

Purpose: To investigate effectiveness of two training procedures--titration and verbal instructions--on learning and transfer of a two-choice simultaneous visual discrimination involving spatial separation of stimulus and response.
Subjects: 72 experimentally naive subjects, consisting of 36 trainable retardates and 36 normal nursery school children, equated on M.A. and socio-economic level.

Methods: Three groups, each consisting of 12 trainable retardates and 12 normal nursery school children, were treated identically on a transfer task, following three different types of training. Verbal instructions group was given specific verbal instructions designed to direct attention to relevant cues; titration group was trained by the technique of "shaping" observing responses by successive approximations, i.e., by beginning training with stimulus contiguous with response blocks and then gradually increasing the separation; control group was trained with stimuli placed six inches above response blocks and without aid of any attention-focusing technique. Training problem was a simple two-choice, simultaneous visual discrimination involving two dimensions--color and form. Transfer task was also a color-form pattern discrimination with the restriction that each subject receive a different color and form to that received in training.
Findings: Statistically significant differences were found between the control group and the experimental groups, indicating that training procedures facilitated learning and transfer. Differences between retarded and normals were significant only in the control condition, where absence of attention-focusing cues especially penalized retardates.
Investigator(s): Sister M. Athanasius Cunningham, Ph.D., Clinical Psychologist, Sisters of Charity of the Incarnate Word, San Antonio, Tex. (Reported by Norman A. Milgram, Ph.D., Associate Professor, Child Center, Catholic University of America, Washington, D. C. 20017.)
Publication: Ph.D. dissertation, Catholic University of America, 1965.

20-HJ-2 THE INFLUENCE OF VERBAL STATEMENTS UPON THE PERFORMANCE OF MENTALLY RETARDED CHILDREN

Purpose: To determine influence of verbal statements on learning tasks performed by mentally retarded children.
Subjects: Educable mentally retarded children obtaining extreme scores on Children's Manifest Anxiety Scale.
Methods: Two experimental groups are subjected to verbal statements designated as "encouraging" and "discouraging" issued by an authority figure immediately prior to and during exposure to a digit substitution, a concept formation, and an object assembly task. A third group designated "neutral" or control group is exposed to same learning tasks but without prior verbal statements. Upon completion of learning tasks, performance of the two experimental groups and the control group will be compared on each learning task. Analysis of main and interaction effects of the two independent variables on the dependent variables will be accomplished through analysis of variance techniques.
Investigator(s): Godfrey D. Stevens, Ph.M., Ed.D., Professor, Program in Special Education and Rehabilitation, and Richard K. Myers, M.S., University of Pittsburgh, Pittsburgh, Pa. 15009.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-HN-1 BIOCHEMISTRY OF MONGOLISM--PKU

Purpose: To elucidate the disease entity.
Subjects: Clinical patients.
Methods: Biochemical research.
Duration: 1961-continuing.
Investigator(s): Martin D. Appleton, Ph.D., Professor of Chemistry, University of Scranton, Scranton, Pa.
Cooperating group(s): Scranton Foundation; National Science Foundation; Public Health Service, U. S. Department of Health, Education, and Welfare.

20-HN-2 EPIDEMIOLOGY OF DOWN'S SYNDROME (MONGOLISM)

Purpose: To demonstrate any differences in occurrence of Down's syndrome in time and space, and other factors of possible etiological importance.

Subjects: All children born between 1951 and 1960 in selected California counties and diagnosed as having Down's syndrome.

Methods: Varied and extensive case-finding methods. Geographic areas to be investigated represent both urban and rural, with differences in climate, agriculture, and other variables.

Investigator(s): Robert W. Day, M.D., California State Department of Public Health, 2151 Berkeley Way, Berkeley, Calif. 94704.

Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-HP-1 A COMPARISON OF FILM STRIPS, EYE PUFF, AND MOTION PICTURE TECHNIQUES IN THE AUDIOMETRIC CONDITIONING OF MENTALLY RETARDED CHILDREN

Purpose: A follow-up of a study done in 1965 to develop a more effective and more motivating method of testing hearing of mentally retarded children, many of whom may have higher I.Q.'s and more academic potential than now realized due to a hearing loss.

Subjects: 105 children with I.Q.'s of 30 to 70; 40 children with I.Q.'s of 0 to 30.

Methods: Three conditioning methods are employed: (1) filmstrip--child presses button in response to tone in order to view next frame in Walt Disney-type story; (2) eye puff--child is presented with tone in earphone immediately followed by puff of air to make eye blink. When conditioned, eye blink occurs upon hearing tone alone; (3) motion picture--similar to filmstrip, but able to sustain interest longer. Testing takes much longer with this method.

Findings: Both filmstrip and eye-puff techniques are extremely effective.

Duration: March 1965-July 1966.

Investigator(s): Ross M. Weaver, M.S., Assistant Professor of Speech and Audiology, Brigham Young University, Provo, Utah 84601.

Cooperating group(s): Utah State Training School.

20-HP-2 TRAINING PRESCHOOL RETARDATES IN FOCAL ATTENTION AT HOME BY PARENTS

Purpose: To explore whether training with retardates in focal attention (i.e., the process of deploying attention selectively, inspecting an object while excluding attention from others) would foster emergence and development of higher level functions (e.g., form discrimination, concept formation) which are presumed to emerge from more basic process of focal attention; to determine advantages and disadvantages of having such training conducted at home by parents of retardates.

Subjects: 70 retardates, boys and girls, attending a preschool program; half are assigned to at-home training condition, half represent controls.

Methods: Materials: magnetic boards and plywood cutouts, white and black, circles, squares, and triangles with magnets fixed to one side. A training program was devised, using these materials, and consisting of 22 levels increasing in complexity. With each level, an array of cutouts is placed on the board and child is trained, with verbal instruction and pantomime, to remove a specific cutout, while leaving others behind. Parents administer training for a 12-week period at home. During training, parents meet as a group to discuss child-management problems concerned with conducting training. Pre- and post-training criterion measures are obtained (e.g., of directionality, of concept formation). These will be compared with criterion measures of controls obtained before and after an equal interval of time.

Findings: Work to date indicates that majority of experimental subjects show significant improvement in one or more areas measured after training, and that effects of prescribed activity on parent-child relationships appear important for study and treatment.

Duration: November 1964-June 1966.

Investigator(s): Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604.

Cooperating group(s): Massachusetts Division of Mental Hygiene; nursery schools for retardates in Needham, Norwood, and Fitchburg, Massachusetts.

Publication: Work presented at 1966 annual meeting of American Orthopsychiatric Association; total study to be published.

20-HP-3 SUSTAINED VERSUS INTERRUPTED INSTITUTIONAL EFFECTS ON RETARDATES

Purpose: To explore the impact of summer furloughs vs. no furloughs on cognitive and noncognitive aspects of retardates.

Subjects: 150 educable and trainable mental retardates.

Methods: Standardized self-concept, anxiety, achievement measures before and after summer furlough, to assess effects of sustained vs. interrupted institutionalization; other demographic and sociometric measures to be included plus attendant parental attitudes.

Findings: Pilot work suggests slight achievement score gains favoring those who do not receive furloughs.

Duration: April-November 1966.

Investigator(s): Charles C. Cleland, Ph.D., Associate Professor of Special Education and Research Director, Vocational Rehabilitation Administration and Training Center in Retardation, University of Texas, Austin, Tex.

Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

Publication: Pilot work presented to Third Kennedy Scientific Symposium, Boston, Mass., to be published by Kennedy Foundation. Second study in *American Journal of Mental Deficiency*.

20-HR-1 MENTAL RETARDATION SERVICES BOARD

Purpose: To provide mentally retarded children with rehabilitation services through coordination of services in large metropolitan area.

Subjects: Mentally retarded children in six communities of Los Angeles County.

Duration: August 1965-July 1968.

Investigator(s): Zev W. Wanderer, Ph.D., Project Director, 537 S. Wilton Pl., 90005; and Ivy P. Mooring, Ph.D., Mental Retardation Services Board, 1313 W. 8th St., Los Angeles, Calif. 90017.

Cooperating group(s): County of Los Angeles; State of California; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

Publication: When appropriate, in scientific journals.

20-HR-2 PROGRAMMING TO IMPROVE SOCIAL SKILLS OF RETARDATES

Purpose: Based on the observation that institutionalized retardates have a lower social quotient than do noninstitutionalized retardates of the same I.Q. entering Fairview Home, this project is concerned with providing an experientially designed program closely attuned to the experience of family, home, and community living to overcome this deficit.
Subjects: 96 moderately to mildly retarded boys and girls between the ages of 6 and 13.
Methods: Adaptation of an already established curriculum guide to the cottage living, recreation, and religious programs and activities through coordinated involvement of all personnel now charged with direct patient care, treatment, and training. An on-the-scene unit treatment staff coordinates program planning and implementation, and direct program application to each individual in project population. Results are evaluated against baseline data established for both patients and program personnel before start of project.
Duration: Not reported-1971.
Investigator(s): James M. Pomeroy, M.D., Superintendent, and Ruth Jaynes, M.S.W., Psychiatric Social Worker, Oregon Fairview Home, 2250 Strong Rd., S.E., Salem, Oreg. 97310. (Reported by Loring F. Chapman, Ph.D., Director of Research, Oregon Fairview Home.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-HR-3 EFFECTIVENESS OF A PLACEMENT-ORIENTED SPECIAL WORK ADJUSTMENT PROGRAM FOR MENTALLY RETARDED ADOLESCENTS AND YOUNG ADULTS WITH A HISTORY OF SCHOOL DROPOUT

Purpose: To demonstrate value of a special work adjustment program for mentally retarded young people with a history of school dropout; to test techniques (including remunerative work) which may contribute to employment success of this group.
Subjects: Mentally retarded individuals (approximate I.Q. range 55 to 80) who are potentially feasible for employment in industry but have failed to achieve a satisfactory vocational adjustment in community subsequent to leaving school.
Methods: Following services are offered to subjects: remunerative work experience (including work evaluation, personal adjustment training, and supportive work experience), individual and group employment counseling, intensive special placement, parent counseling, group work and recreation, and remedial instruction. An evaluation service tests values of this program through maintaining suitable records and reports, studying clients as individuals and in groups, and conducting follow-up activities.
Duration: October 1964-September 1967.
Investigator(s): Milton Cohen, Executive Director, Federation of the Handicapped, 211 W. 14th St., New York, N. Y. 10011.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

20-HT-1 SOCIALIZATION OF RETARDATES: A CASE STUDY IN INSTITUTIONAL GOAL REORIENTATION

Purpose: To explore implications of drawing on the theoretical concept, socialization, to formulate a treatment program for retardates within the framework of resources available at an institution beginning to reorient

from custodial patterns of care. The focal questions are: (1) What kind of program might be addressed to those specific behaviors of the retardate, other than his intellectual deficits, that were labelled inappropriate in the community and that led to his extrusion to the Training School?; (2) What are the organizational issues that must be addressed for such a program to exist within the Training School?; and (3) What are the effects of such a program on the retardates and on the staff?
Methods: A variety of systematic and unsystematic inductive techniques ranging from participant observations to factor analysis of interview and rating data.
Investigator(s): Ann C. Maney, Ph.D., Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd., East, Adelphi, Md. 20783.
Cooperating group(s): Social Research Section, Division of Health Affairs, University of North Carolina; O'Berry Training School, Goldsboro, N. C.; North Carolina State Hospital Board of Control.
Publication: American Journal of Mental Deficiency 69:3:372-384, November 1964.

20-HT-2 A FOLLOW-UP STUDY OF PATIENTS LEGALLY COMMITTED TO A STATE INSTITUTION FOR THE RETARDED

Purpose: To investigate reasons for admission of this group, their characteristics with regard to age, I.Q., family, and social background, and to follow their prognosis over seven years.
Subjects: 142 patients committed to Dr. Joseph H. Ladd School, Exeter, R. I., over years 1958 to 1965: 126 committed by family court, 16 as defective delinquents.
Methods: Total admissions and commitments to the institution over 57 years are studied, mean I.Q. values obtained, social, medical histories studied, and prognosis determined as, discharged from care, transferred to other institutions, or on placement with supervision.
Findings: 57 percent are still institutionalized, 14 percent discharged, 26 percent in community on placement. Chief reasons for admission are sexual offenses, crimes against property, behavioral disorder. Offenses in 11 to 20 age group outnumbered all other groups three to one. Mean I.Q. was 60, suggestive of good capacity yet only 14 percent were discharged.
Investigator(s): Robert B. Kugel, M.D., Professor of Child Health, Child Health and Development Center, Brown University, Providence, R. I. 02912.

20-HT-3 AN INVESTIGATION OF FACTORS CONTRIBUTING TO SUCCESSFUL AND NONSUCCESSFUL COMMUNITY ADJUSTMENT OF DISCHARGED RETARDATES

Purpose: To determine predictive elements in past life trajectories, particularly in infancy and childhood, that are most closely associated with post-discharge success and nonsuccess in several separate behavior categories; to identify good risks for later vocational training, and poor risks for new, better, and earlier habilitation techniques.
Subjects: 575 patients discharged from July 1952 through June 1961 from Pineland Hospital and Training Center, Maine's state institutional facility for the education, training, and care of the mentally subnormal.
Methods: Study of three life periods: birth to admission, institutional, post-discharge (at least four years); psychological, social, cultural, experiential, symptomatic factors, and post-discharge: employment, financial, legal-illegal, personal, social network, and constellation problems. Information obtained by detailed predischarge case histories, multiple

facet post-discharge interviews with patient and/or intimates, and official records of state agencies, civil authorities, and institutions. Data transferred to 25 standard IBM cards per patient (14,375 cards for the study). Statistical description and analysis through IBM 1620 Computer and disc pack.
Findings: First 314 cases: substantiation of large proportion of unfavorable pre-institutional backgrounds, including relatively large numbers of siblings, poorly educated, emotionally disturbed parents of lowest social class origins, disrupted families - during childhood about 80 percent of patients had structural breaks in adult family constellations, averaging three such breaks per patient.
Duration: July 1964-June 1969.
Investigator(s): Peter W. Bowman, M.D., Superintendent, and John L. Hoffman, Ph.D., Social Research Scientist, Pineland Hospital and Training Center, Pownal, Me. 04069.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Vocational Rehabilitation Administration in 1969; articles planned for various journals before and after that date; comprehensive single publication subject to future circumstances; predischarge characteristics of first 314 cases reported on at Northeastern Regional Conference of American Association on Mental Deficiency, September 24, 1965, in Portland, Me.

20-HT-4 NORTRIPTYLINE HYDROCHLORIDE IN THE TREATMENT OF ENURESIS IN MENTALLY RETARDED BOYS

Purpose: To evaluate the effectiveness of nortriptyline hydrochloride as a control agent in enuresis.
Subjects: 34 mentally retarded boys who wet the bed five or more nights in a 20-day period.
Methods: Two-part double-blind design. Part I consists of three 20-day periods: (1) observation of frequency of enuresis without medication; (2) half of the group receives 25 mg. nortriptyline and the other half a matching placebo; and (3) the medication and placebo are reversed. Part II involves two 10-day periods: (1) no medication for either group; and (2) 25 mg. nortriptyline for both groups.
Findings: Statistically significant difference in enuretic frequency between drug and nondrug conditions. Twenty of the 34 boys' enuresis decreased by approximately 50 percent or more at the end of Part II. About two-thirds of the "improved" group maintained gains after a three-month period without medication.
Duration: July 1965-March 1966.
Investigator(s): Ernest H. Smith, M.A., Psychologist, and Raphael Gonzalez, M.D., Psychiatric Consultant, Wayne County Training School, 16000 Sheldon Rd., Northville, Mich. 48167.
Cooperating group(s): Eli Lilly and Company.
Publication: Submitted for publication.

20-HW-1 ATTITUDES OF PARENTS OF HIGH AND LOW SOCIAL CLASS LEVELS TOWARD THEIR EDUCABLE MENTALLY HANDICAPPED CHILDREN

Purpose: To investigate attitudes of parents of high and low social class levels toward their educable mentally handicapped children.
Subjects: 100 parents of upper-middle social class level, and 100 parents of lower-lower social class level.

Methods: Parental attitudes and reaction toward their children are determined through their responses to an incomplete sentence form. Parental estimates of their children's abilities are determined through responses to a questionnaire form. Responses of both social classes are compared.
Duration: Not reported-August 1966.
Investigator(s): Richard P. Iano (Graduate Student, Division of Special Education and Rehabilitation, Syracuse University), 148 Greenwood Ave., Wyncote, Pa. 19095; G. Orville Johnson, Ed.D., and Andrew L. Shotick, Ph.D., Professors of Special Education; and William F. Anderson, Ph.D., Professor of Psychology and Education, Syracuse University, Syracuse, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Emotional disturbances

20-IA-1 INDEX OF CHILDHOOD PSYCHOSIS

Purpose: Based on material from an earlier study on childhood psychosis (Research Relating to Children, Bulletin 18), to study relevant key concepts, theories, and data of this area.
Methods: Use of tape recordings of sessions of psychotherapy in a modification of the Hampstead Index.
Duration: 1966-indefinite.
Investigator(s): Rudolf Ekstein, Ph.D., Director, Project on Childhood Psychosis; Elaine Caruth, Ph.D.; Seymour Friedman, M.D.; and Mortimer Meyer, Ph.D., Reiss-Davis Clinic for Child Guidance, 9760 W. Pico Blvd., Los Angeles, Calif. 90035.
Publication: Ekstein, Rudolf, Children of Time and Space, of Action and Impulse--Clinical Studies on the Psychoanalytic Treatment of Severely Disturbed Children, Appleton-Century-Crofts, Inc., April 1966.

20-ID-1 PERCEPTUAL DISSONANCE AND ROLE LEARNING

Purpose: To develop a test of parent perception which would hopefully reflect parent identification and psychosexual role orientation; to determine if such a measure would differentiate between patients and normal controls and especially those patients who typically have psychosexual role confusion; and to test the hypothesis that a pattern of parent perception strongly indicative of inappropriate parent identification would differentiate certain groups of mental patients from normal controls.
Subjects: 26 paranoid schizophrenics, 26 other schizophrenics, 26 alcoholics, 26 neurotics, and 26 normal controls, all males, matched for age and socio-economic status; also 500 school children from grades four through 12.
Methods: Questionnaire administered to subjects and hypothesis tested by analysis of variance on three clusters of items which are negative perceptions of father, maternal closeness and overprotection, and dissonant perceptions of father. The latter cluster of items consisted of two types: (1) the mother was preferred or idealized over father in some manner, that is, a preference was stated, and (2) the mother disqualified father in some way.
Findings: Significant differences were found between paranoid schizophrenics, other type schizophrenics, and alcoholics, and normals on these three clusters of items. Neurotics did not differ significantly from

normals.
Duration: Fall 1963-continuing.
Investigator(s): Kenneth R. Piety, Ph.D., Assistant Chief, Psychology Services, Veterans Administration Hospital, Murfreesboro, Tenn. 37130.
Publication: *Journal of Clinical Psychology* 22:1:10-14, January 1966. Investigator plans to write papers on cross-validation studies. A few reprints of the original study are still available from investigator.

20-IG-1 ANTISOCIAL BEHAVIOR IN EARLY CHILDHOOD

Purpose: To focus on an area of mental illness in early childhood designated as antisocial character development.
Subjects: 20 to 24 children and their parents plus a group of 10 or more control children and their parents.
Methods: Hypotheses have been set up pertaining to influences of parents on the children in the study group which are related to the antisocial development of the children. Carefully prepared material from interviews with the parents is made available to independent raters who are employed to test the hypotheses.
Duration: October 1962-not reported.
Investigator(s): David E. Reiser, M.D., Director, and Catherine Roff, Ph.D., Assistant Director, James Jackson Putnam Children's Center, 244 Townsend St., Boston, Mass. 02121.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-IG-2 INCIPIENT STUTTERING AND SPONTANEOUS REMISSION OF STUTTERED SPEECH

Purpose: To determine incidence of incipient stuttering symptoms and percentage of those who experience spontaneous remission of these symptoms; to determine differences in symptomatology and some parental behaviors between those who experience spontaneous remission of stuttered speech and those who do not.
Subjects: Approximately 5,000 subjects sampled in kindergarten to 9th grade in six schools in western New York.
Methods: Survey questionnaire was developed in pilot study utilizing 400 subjects enrolled in Campus School at State University of New York College at Buffalo. Subjects took the questionnaire home to be completed by parents and returned within one week.
Findings: (1) Incipient stuttering reported in approximately 10 percent of sampled population; (2) a large majority of parents admonished children with suggestions for elimination of symptoms; (3) age at onset for most of subjects was between two years-six months and three years-six months; and (4) duration of symptoms for most subjects was two years with the large majority experiencing spontaneous remission of symptoms by age six.
Duration: February-May 1966.
Investigator(s): Stanley Dickson, Ed.D., Professor of Speech Pathology and Audiology, State University of New York, College at Buffalo, Buffalo 22, N. Y. (Reported by Horace Mann, Ph.D., Director, Division of Exceptional Children, State University of New York, College at Buffalo.)
Cooperating group(s): Williamsville Central Schools, Williamsville, N. Y.
Publication: To be submitted to *Journal of Speech and Hearing Research*.

20-IG-3 STUDY OF THE CONTRIBUTION OF FAMILY VARIABLES TO THE ETIOLOGY OF STAMMER

Purpose: To isolate factors in the family which contribute to emergence and perpetuation of stammer; to develop a theoretical model and methods of studying the family applicable to clinical problems in general.
Methods: Phase 1. Formulation of hypotheses to be derived from family therapy with a small number of family groups; Phase 2. Systematic testing of these hypotheses.
Duration: March 1965-March 1969.
Investigator(s): Eleanora S. Wertheim (Ph.D. Candidate), Senior Psychologist, Royal Children's Hospital, Parkville, Melbourne, Australia.
Cooperating group(s): Royal Children's Hospital Research Foundation.

20-IG-4 DEVELOPMENT OF LANGUAGE BEHAVIOR IN AUTISTIC CHILD

Purpose: To develop verbal and nonverbal communication behavior in a mute autistic boy, who was essentially nonresponsive to environmental stimuli of any kind.
Subjects: Four-and-a-half year old boy who did not speak, had inconsistent hearing, and unusual behavior consisting of periods of "finger flicking" and sitting very still and staring off into space.
Methods: Operant conditioning procedures are main treatment variable, with changes in form and frequency of verbal and nonverbal behavior as dependent variables. Conditions have been devised or arranged in a number of tasks and activities to prompt, develop, and maintain new behaviors. These conditions were designed to increase attending behavior to human face, mouth, and speech stimuli, rate of emission of vocal and nonvocal responses of several forms, positive reinforcement value of people, and rate of discriminative nonvocal and vocal responses to auditory and associated visual stimuli.
Findings: Increase in frequency and variety of verbal and nonverbal behavior.
Duration: October 1965-September 1966.
Investigator(s): Robert E. Schell, Ph.D., Assistant Professor, Department of Psychology, Michigan State University, East Lansing, Mich.; Joel Stark, Ph.D.; and Jane J. Giddan, M.A., Institute for Childhood Aphasia, School of Medicine, Stanford University, Palo Alto, Calif.
Cooperating group(s): California Scottish Rite Foundation; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: To be submitted for publication in speech or psychology journal.

20-IG-5 SOME CLINICAL OBSERVATIONS OF TRICHOTILLOMANIA IN CHILDREN

Purpose: To investigate selected social and psychological characteristics of trichotillomania in children; to study patterns of family relationships and life history events that are related to the clinical picture of trichotillomania in a small group of female patients.
Methods: Bibliographical study and review of medical, psychiatric, and psychoanalytic literature in this area; survey of records of presenting complaints of all patients referred to Mental Health Study Center since 1952 to determine number, age, sex, and referral source of all children referred with trichotillomania as presenting problem; and clinical analysis of intake interviews, psychological tests (when available), and psychiatric examinations of children and their families evaluated at the Mental Health Study Center since 1962 with trichotillomania as the major problem at time

of referral.
Duration: 1964-1966.
Investigator(s): Fortune V. Mannino, Ph.D., Director, Consultation Services, and Rafael A. Delgado, M.D., Consultant in Child Psychiatry, Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd. East, Adelphi, Md. 20783.

20-IG-6 EARLY INFANTILE AUTISM: ETIOLOGY, TREATMENT, PARENTAL INFLUENCES

Purpose: To test two central hypotheses concerning etiology of early infantile autism, and the parental influences in the recovery process.
Subjects: Ten children between ages two and five, and their parents.
Methods: In a clinical-experimental setting, children are subjected to high-impact sensory stimulation of strongly affective quality (to compensate for hypothesized sensory deprivation). Developmental growth of children is measured at fixed intervals with Rating Scales, Developmental Scales, Intelligence and Social Maturity Tests, etc. Films are also taken.
Findings: Five subjects seen to date have shown remarkable growth in intellectual, social, affective, and motoric behavior.
Duration: April 1965-March 1972.
Investigator(s): Austin M. DesLauriers, Ph.D., Head, Psychology Department, and Carole F. Carlson, Ph.D., Research Associate, Michael Reese Hospital, Psychiatric Institute, 29th and Ellis, Chicago, Ill. 60616.
Publication: Book on theory and findings is planned for 1967.

20-IG-7 AN INVESTIGATION OF THE RELATIONSHIP BETWEEN ANXIETY AND THE PRESENCE OR ABSENCE OF FORMAL FEEDBACK IN AUTO-INSTRUCTIONAL PROGRAMS

Purpose: To investigate interacting effects of anxiety level and feedback on learning by programmed instruction.
Subjects: 44 girls and 36 boys in fifth grade who scored at extreme high and low ends of the distribution on the Test Anxiety Scale for Children (TASC).
Methods: Boys and girls constituted separate samples because previous research has shown that girls score higher on the TASC than boys, and their scores correlate higher on subject matter tests. High-anxious and low-anxious subjects were assigned to feedback and no-feedback versions of a programmed lesson on earth-sun relationships in a two by two design. Programs were identical, except one supplied feedback and other did not. Following completion of program (mean time was two hours, forty-five minutes), subjects were tested to measure immediate retention of program content. Nineteen days later, subjects were retested to measure delayed retention.
Findings: Significant interaction of anxiety and feedback was obtained for girls, but no significant interaction was obtained for boys. Same held true for post-test on retention data.
Duration: January 1964-February 1965.
Investigator(s): Peggie L. Campeau, M.A., American Institute for Research in the Behavioral Sciences, Station A, P.O. Box 11487, Palo Alto, Calif. 94306.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education.

20-IP-1 A PROGRAM FOR THE OUTPATIENT EVALUATION OF PSYCHOPHARMACOLOGICAL AGENTS IN CHILDHOOD SCHIZOPHRENIA

Purpose: To assess the behavioral effects of Thorazine and Benadryl in psychotic children who are living at home.
Subjects: Children diagnosed schizophrenic between the ages of five and 10, who are on the waiting list of a school for severely emotionally disturbed children.
Methods: Subjects are evaluated by a psychiatrist, psychologist and neurologist. In addition, the mothers are interviewed concerning the children's past and current functioning. Subjects are then assigned randomly to one of three groups: Thorazine, Benadryl and placebo, which are given in liquid form. For the first four weeks, children are on an increasing fixed dosage schedule; during the next four weeks dosage is regulated by the psychiatrist. While on medication, children are seen weekly. Maximum dosage during first four weeks is: Thorazine 150 mg., Benadryl 300 mg., daily. Children are re-evaluated and baseline measures repeated four and eight weeks after treatment.
Duration: January 1965-1971.
Investigator(s): David M. Engelhardt, M.D., Professor of Psychiatry, State University of New York, Downstate Medical Center, 600 Albany Ave., Brooklyn, N. Y. 11203.

20-IP-2 RELATIONAL BEHAVIOR OF MOTHERS AND THEIR SCHIZOPHRENIC CHILDREN

Purpose: To discover potential pathogenic influence of verbal communication.
Subjects: 35 schizophrenic children and their mothers.
Methods: 20-minute interviews for each child, observed through one-way mirror and recorded by tape and movie.
Duration: 1962-1969.
Investigator(s): David M. Levy, M.D., Research Consultant; William Goldfarb, M.D., Ph.D., Director; and Donald Meyers, M.D., Research Associate, Henry Ittleson Center for Child Research, Jewish Board of Guardians, 5050 Iselin Ave., Bronx, N. Y. 10471.
Cooperating group(s): Ittleson Family Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers read at American Orthopsychiatric Association meeting, 1962; New York Academy of Science, 1963; and Bidecennial meeting, Columbia University, 1965.

20-IP-3 GROWTH AND FAMILY PATTERNS IN CHILDHOOD SCHIZOPHRENIA

Subjects: 100 schizophrenic children and their families.
Methods: Psychiatric study; serial psychological and clinical investigations; and semi-structured and structured studies of relational behavior.
Duration: 1961-1969.
Investigator(s): William Goldfarb, M.D., Ph.D., Director, Henry Ittleson Center for Child Research, Jewish Board of Guardians, 5050 Iselin Ave., Bronx, N. Y. 10471.
Cooperating group(s): Ittleson Family Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: List of publications available from investigator.

20-IP-4 COPING BEHAVIOR IN SCHIZOPHRENIA AND RELATED CONDITIONS

Purpose: To study patterns of coping with interpersonal stress. Families with a schizophrenic adolescent will be compared with families with moderately disturbed adolescents having subclinical schizophreniform symptoms, acting-out symptoms, and neurotic symptoms. These groups will be compared with normal controls. Also, specific attributes of coping behavior of schizophrenic and adolescent groups to cues related to intrafamilial conflicts will be investigated.
Methods: Controlled role-playing in interpersonal dyads and triads of family groups in handling problems which various members of the family have identified as critical; semi-structured interviews of child-rearing patterns, and coping styles of adolescents in handling problems in various aspects of functioning, such as conflicts, autonomy, acceptance of responsibility, etc.; and specific experimental situations to investigate coping styles.
Duration: 1964-1969.
Investigator(s): Eliot H. Rodnick, Ph.D., Professor of Psychology, and Michael J. Goldstein, Ph.D., Associate Professor of Psychology, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): Camarillo State Hospital, California State Department of Mental Hygiene; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in appropriate journals.

20-IP-5 EXPERIMENTAL STUDY OF FAMILIES WITH SCHIZOPHRENICS

Purpose: To develop a method for the experimental study of interaction among family members; to subject to critical examination several prominent hypotheses about patterns of interaction and communication in families with schizophrenic children.
Subjects: 36 families with a schizophrenic child, and a control group of 24 normal families.
Methods: Parents and schizophrenic child are brought into a controlled experimental situation, using Strodtbeck's method of "revealed differences" to obtain a "sample of interaction". Characteristics of family interaction are measured through 13 independent coding systems especially developed for this purpose. Interaction in schizophrenic families is compared with interaction in normal families; each family serves as own control since parents take part in two discussion sessions, once with one child and a second time with another child in same family. Sex and pre-morbid history of patient is also controlled.
Duration: 1963-1966.
Investigator(s): Elliot G. Mishler, Ph.D., Director of Psychological Research, Massachusetts Mental Health Center, and Clinical Associate in Psychology, and Nancy E. Waxler, Ph.D., Research Associate in Psychology, Department of Psychiatry, Harvard Medical School, Boston, Mass. 02115.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-IS-1 AUDITORY PERCEPTION OF PARENTAL VOICES IN DISTURBED FAMILIES

Purpose: To determine whether parental voices are equally perceived within the family, and to discover whose voice the child responds to.
Subjects: A sequential sample of 20 families presenting themselves at the Montreal Jewish General Hospital's Family Psychiatry Clinic, plus a

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sample of nonclinical families matched for family size, constitution, age of children, etc.
Methods: Both parents are told to read three groups of sentences - positive, neutral, and negative in content - into a tape recorder. Then parents' voices are played through earphones simultaneously into the child's ears at the same decibel level. The child is then asked to recall words heard and recalled from a given sample. The difference between the number of words spoken by the parents is noted.
Findings: Disturbed children hear one parent's voice much more than the other's. This is unaffected by gross changes in volume. Normal children and undisturbed siblings hear both parents more or less equally, and their perception is affected by factors such as volume.
Duration: 1965-1966.
Investigator(s): Vivian Rakoff, M.A., Assistant Director of Research, and John Sigal, Ph.D., Associate Director of Research, Department of Psychiatry, Jewish General Hospital, Montreal 26, Que.
Cooperating group(s): Quebec Mental Health Grant.

20-IS-2 REPROGRAMMING THE SOCIAL ENVIRONMENT OF DEVIANT CHILDREN

Purpose: To provide a behavior modification program which alters the social environment in which the deviant child lives.
Subjects: Preschool and primary grade children.
Methods: Conditioning procedures are used in classroom and in homes to change reinforcement schedules being used by parents and peers. In first phase of the study, nonsocial reinforcers are used to change the interaction within a social system. This implies that in second stage of procedure, behavior of members in social system are being maintained by other members of group.
Findings: The observation data from three families show marked reduction in symptom behavior of child when child is treated by other members of his social group.
Duration: 1965-indefinite.
Investigator(s): Gerald R. Patterson, Ph.D., Professor of Psychology, University of Oregon, Eugene, Oreg.
Publication: Journal of Child Psychology and Psychiatry, in press; another article submitted to Journal of Experimental Child Psychology.

20-IV-1 BEHAVIOR THERAPY AND STUTTERING

Purpose: To apply principles of behavior therapy to stutterers and to evaluate their effectiveness.
Subjects: 30 adolescent stutterers, age 16 and over.
Methods: Therapy principles based on learning theory and modeled similarly to those espoused by Wolpe and by Eysenck.
Duration: January 1966-December 1968.
Investigator(s): Burl B. Gray, Ph.D., Director of Research, Speech Pathology, and Gene England, Ph.D., Director, Monterey Institute for Speech and Hearing, Monterey, Calif.
Publication: Plan to publish materials in pertinent speech pathology and psychology journals.

20-IV-2 THE EFFICACY OF SHORT-TERM PARENT COUNSELING GROUPS FOR CASES ON THE THERAPY WAITING LIST

Purpose: To determine effectiveness of short-term parent counseling groups in improving parent-child relationships and fostering constructive personality change in children.
Subjects: Parent couples on a child guidance clinic waiting list who met criteria of mild to moderate disturbance.
Methods: Short-term parent counseling groups were conducted. These groups were structured, with focus maintained on parent-child issues and with parental as well as therapist participation kept at high levels. Parent self-report questionnaires provided quantitative outcome indices. Research design included an own-control feature so that changes during counseling could be compared with changes during a comparable period of no clinic involvement prior to counseling.
Findings: Data on two six-session groups suggest that positive changes in parents' evaluation of themselves and their children may be attributable to the counseling group experience. Certain independently rated patient role characteristics, such as disposition to critically explore one's own behavior, appear to differentiate high improvers from those who gain little.
Duration: January 1965-indefinite.
Investigator(s): Ralph Bierman, Ph.D., Senior Clinical Psychologist, and David Hallowitz, M.S.S.W., Assistant Director and Chief Psychiatric Social Worker, The Psychiatric Clinic, Inc., Central Park Plaza, Buffalo, N. Y. 14214.
Publication: Paper read at the annual meeting of the American Orthopsychiatric Association, San Francisco, Calif., April 1966. Digest published in American Journal of Orthopsychiatry 36:290-291, 1966.

20-IV-3 CHILDRENS' DREAMS AND INTRA-FAMILIAL COMMUNICATION

Purpose: To improve treatment of children through the use of childrens' dreams.
Subjects: Clinic population.
Methods: Family conferences to discuss the ability of parents to recognize their child's dreams; statistical analysis to determine improvement of familial communication as a result of study of child's dreams.
Duration: September 1965-indefinite.
Investigator(s): Irving Markowitz, M.D., Director, Child Guidance Clinic, 115 S. Munn Ave., East Orange, N. J.
Publication: "An Investigation of Parental Recognition of Children's Dreams - a Preliminary Report," by Irving Markowitz, M.D., Joseph C. Mark, Ph.D., and Stanley Seiderman, M.S.S.S. Other publications are planned in the course of research.

20-IV-4 RETURNING TO THE GROUP: DYNAMICS OF THE "LATE" PHASES IN GROUP THERAPY

Purpose: To establish reasons for former terminations and resumption of therapy, and to determine course of final phase of treatment through examination of protocol from four groups involved in group therapy.
Subjects: Four simultaneously conducted groups, each having a life of between two and four years: (1) children and adolescents, (2) delinquents, (3) a mixed adult group, and (4) a geriatric group. Each group has one or more patients who have returned to their respective groups after an average cessation of therapy of seven and one-half months.
Methods: Group psychotherapy.

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Duration: 1963-1967.
Investigator(s): Hans A. Illing, Ph.D., Senior Psychiatric Social Worker, Parole Outpatient Clinic, California State Department of Corrections, 107 S. Broadway, Los Angeles 12, Calif.
Publication: Publication is planned after completion of project, possibly in 1967.

20-IV-5 THE APPLICATION OF A THREE-LEVEL THEORY OF LEARNING TO REORIENTING THE SOCIALLY HOSTILE PRESCHOOL CHILD

Purpose: To attempt, by a series of steps, through conditioning for more acceptable behavior, conceptualization about the benefits of more acceptable behavior, and development of a verbalized self-concept as to the kind of child who acts acceptably, to build a stable socially acceptable pattern of behavior in a child.
Subjects: Five three- and four-year old children.
Methods: Using five college students to reinforce all tendencies toward acceptable behavior as these are shown on a kindergarten playground.
Findings: Five of the children showed definite improvement at level one. Three of the children were able to reach level two. One of the children reached level three.
Duration: September 1964-June 1965.
Investigator(s): John A. R. Wilson, Ed.D., Associate Professor of Education, University of California, Santa Barbara, Calif.
Cooperating group(s): Catholic Welfare Bureau; Neighborhood House.
Publication: Report to California Educational Research Association.

20-IV-6 REMEDIATION OF DISTURBED AND RETARDED CHILDREN

Purpose: To develop broad range, interdisciplinary educational and behavioral methods for the treatment of disturbed and retarded children.
Methods: A multidisciplinary research program with many separate and integrated studies.
Duration: September 1965-indefinite.
Investigator(s): Herbert C. Quay, Ph.D., Research Director, Children's Research Center, and Samuel A. Kirk, Ph.D., Professor of Education and Psychology, and Director, Institute for Research on Exceptional Children, University of Illinois, Urbana, Ill.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles in professional journals and books are planned.

20-IV-7 DIAGNOSTIC EVALUATIONS OF CHILDREN FOR INDIVIDUAL PSYCHOTHERAPY THROUGH FAMILY INTERVIEWS

Purpose: To assess possibilities of using conjoint family interviews to assess quickly and decisively the diagnosis and therapeutic needs of children brought to a general psychiatric clinic for individual therapy; to see if the operations of the diagnostic process can be hastened; and to standardize the interviews through filmed, recorded, and written records to obtain definite criteria of success or failure in approach.
Subjects: Families who apply to the hospital child psychiatry clinic.
Methods: Minimal number of family interviews to determine therapy; follow-

up of families and comparison with those processed in conventional manner.
Duration: April 1965-1967.
Investigator(s): Edward Mason, M.D., Assistant Professor, Harvard School of Public Health; Norman Bernstein, M.D., Assistant Director, and Herbert Cline, M.D., Assistant Psychiatrist, Child Psychiatry Unit, Massachusetts General Hospital, Burnham 7, Boston, Mass. 02114.
Publication: Preliminary report was planned for April 1966.

20-IV-8 A THERAPEUTIC CLUB: ALTERNATIVE TO RESIDENTIAL CARE

Purpose: To determine whether the technique used as an alternative to residential treatment or hospitalization of disturbed latency-age children can be modified to treat equally disturbed pre-pubertal and pubertal children; to learn whether the collaboration of clinicians and group workers can bridge the conceptional gap which exists between the two disciplines and thereby contribute to increased utilization of community centers and settlement houses in mental health work.
Subjects: 6 to 10 latency age boys with severe ego impairment, behavior disturbances, and unfavorable home conditions, referred to the clinic and considered otherwise untreatable in the community.
Methods: Boys will meet as a club five afternoons per week, after school, utilizing facilities of community center. Individual therapy, casework with families and school.
Duration: September 1965-February 1968.
Investigator(s): Roy K. Lilleskov, M.D., Psychiatric Director, James Weldon Johnson Mental Health Clinic, 2089 3rd Ave., New York, N. Y. 10029. (Reported by Monique Diethelm, Administrative Director, James Weldon Johnson Mental Health Clinic.)
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at Child Welfare League of America, spring 1965. Submitted for publication.

20-IV-9 TECHNIQUES OF PLAY THERAPY FOR MODIFYING THE BEHAVIOR OF WITHDRAWN THIRD GRADE BOYS

Purpose: To compare effectiveness of three group play situations in modifying behavior of shy, withdrawn, third grade boys.
Subjects: 11 third grade boys from Torrance (Calif.) Unified School District, referred by teachers and principals as being socially withdrawn, very quiet, introverted, friendless, lacking in spontaneity, maladjusted, but not so withdrawn as to be unable to attend school regularly.
Methods: Weekly therapy session was held for 14 consecutive weeks. A "new" type of play therapy was used on the first group in which tangible rewards were used to reinforce social-approach behavior. Rewards were tokens which could be traded for candy, toys, and trinkets at end of each therapy hour or saved across sessions to obtain more expensive items. Second group was treated similarly to first, but tangible rewards were not used. Third group met without a therapist and acted as a control. Mothers met in guidance groups while sons were in therapy sessions.
Findings: Productivity, anxiety, general psychological adjustment, and discrete problem behavior showed no systematic change over time, nor were there differences which seemed related to the independent variables between the three types of treatment. Some of the observation data demonstrated systematic differences between groups and reliable changes over time, i.e., therapy sessions.

Duration: September 1965-September 1966.
Investigator(s): Paul W. Clement, Ph.D., Instructor of Medical Psychology (in residence), Harbor General Hospital, Medical School, University of California at Los Angeles, Torrance, Calif. 90509.
Cooperating group(s): Attending Staff Association, Harbor General Hospital; Torrance Unified School District, Torrance, Calif.
Publication: Report to be submitted to Journal of Consulting Psychology in fall of 1966.

20-IY-1 GROUP VALUES, FRIENDSHIPS, AND GROUP FORMATION AMONG EMOTIONALLY DISTURBED ADOLESCENTS IN A RESIDENTIAL SCHOOL AND THERAPEUTIC CAMPING SITUATION

Purpose: To study the nature of small group formation among emotionally disturbed adolescents in a residential treatment center; to explore the possible rationales or values that may determine friendship choice, and certain motivational parameters in such adolescents.
Subjects: Approximately 110 emotionally disturbed youngsters between the ages of 14 and 19, who are not psychotic or retarded, but who exhibit a variety of behavioral disturbances and neurotic symptoms.
Methods: Social-distance questionnaires, ratings of popularity, a measure of I.Q., anxiety level, impulsivity, and social activity level were employed; sociogram techniques were also employed. Males and females were studied separately, and the study was done twice (during the school year and during a summer camping season).
Findings: (1) Females formed tight cliquish groups more than males; (2) groups that form are homogeneous as defined by a number of the variables measured; (3) popularity is largely determined by positive or socially acceptable values and behavior; (4) a camp setting diffuses small cliquish groups and increases chances for positive staff infusion to effect adolescent behavior.
Duration: May-August 1964.
Investigator(s): George Spivack, Ph.D., Research Director, Devereux Schools, Devon, Pa.
Publication: Unpublished manuscript.

20-IY-2 A TEMPORAL ANALYSIS OF CRITICAL CLASSROOM BEHAVIOR IN INSTITUTIONALIZED EMOTIONALLY DISTURBED CHILDREN

Purpose: To compare critical classroom behavior of institutionalized emotionally disturbed children with a matched group of public school children.
Subjects: 20 children attending Ypsilanti State Hospital School.
Methods: Objective observation.
Duration: February 1965-February 1967.
Investigator(s): Joseph Motto, Ph.D., Professor of Special Education, Eastern Michigan University, Ypsilanti, Mich.
Cooperating group(s): Ypsilanti State Hospital School.
Publication: To publish in Exceptional Children.

20-IY-3 SOME POSSIBLE DETERMINANTS OF STAFF-STUDENT RELATIONS IN RESIDENTIAL TREATMENT SITUATION

Purpose: To determine whether an emotionally disturbed adolescent's desire

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to relate to a particular staff person is determined by the "chemistry" of staff person's temperament and certain facets of adolescent's personality.
Methods: Temperament ratings on staff personnel; a number of personality ratings and other background information on a group of emotionally disturbed adolescent boys and girls; and a measure of "admiration for staff" completed by every adolescent on every staff member. These data should reveal whether adolescents with particular personalities tend to gravitate toward staff personnel with certain characteristics, and should offer some insights into those staff roles and particular staff characteristics associated with being held in high esteem in the eyes of emotionally disturbed adolescents.
Duration: Completed.
Investigator(s): George Spivack, Ph.D., Director of Research, and Jules Spotts, M.A., Devereux Schools, Devon, Pa.
Cooperating group(s): The Devereux Foundation.

20-IY-4 SOCIAL SYSTEM RESEARCH - DEMONSTRATION IN CHILD CARE

Purpose: To help emotionally disturbed and delinquent adolescent boys in residential treatment translate their needs and problems into the formulation and execution of autonomous group goals.
Subjects: 54 boys, ages 14 through 16, exhibiting antisocial behavior.
Methods: Subjects comprise intermediate unit of three residential cottages. Demonstration cottage is staffed with child care counselors with college backgrounds and is compared with two other cottages staffed by untrained personnel. Comparison is based on continuing independent observation, reflected in descriptive reporting and systematic ratings, and on questionnaires ascertaining values and cottage role structure, administered to all boys in the unit before and after introduction of demonstration staff in one cottage. Additionally, counselor ratings of segments of group interaction in demonstration cottage document the process of increasing autonomous goal striving.
Duration: May 1965-April 1967.
Investigator(s): Howard W. Polsky, Ph.D.; Daniel S. Claster, Ph.D.; and Carl Goldberg, Hawthorne Cedar Knolls School, 293 Linda Ave., Hawthorne, N. Y.
Cooperating group(s): Jewish Board of Guardians (New York City); National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Book in preparation.

Social deviancy

Note: Some of the following delinquency studies were taken from the section, "Current Projects," in the *International Bibliography on Crime and Delinquency*. This publication is prepared by the National Clearinghouse for Mental Health Information of the National Institute of Mental Health (Bethesda, Maryland 20014) from source material provided by the National Council on Crime and Delinquency (44 East 23rd St., New York, N. Y. 10010). The studies are noted: (Reported by NCCD.).

20-JA-1 RECENT TRENDS IN ILLEGITIMACY, 1955-1964

Purpose: To analyze trends in illegitimacy during the past 10 years, and the differentials in illegitimacy between various groups in the population.
Subjects: 50 percent sample of birth certificates from 34 states and the District of Columbia. These states have certificates which ask for legitimacy status of child. From these reports estimates of illegitimate births are made for the United States as a whole.
Methods: Two measures are used to discuss relative occurrence of illegitimate births: (1) illegitimacy rate (illegitimate births per 1,000 unmarried women aged 15 to 44) to describe the risk of an unmarried woman having a child; and (2) the illegitimacy ratio (illegitimate births per 1,000 total births) to learn the proportion of births that are illegitimate. The different risks of having an illegitimate child are discussed for age and color groups for the United States between 1955 and 1964, and between various states for 1960. Use is made of research done by others in order to explain reasons for some of the differences between groups in the population, and an attempt is made to test several hypotheses related to the rapid increase in illegitimacy during the 1940's and early 1950's.
Findings: The increase in the number of illegitimate births during the past few years is due far more to increased numbers of women at risk than increased risks of an unmarried woman having a child.
Duration: 1965-1966.
Investigator(s): Alice J. Clague, B.A., Statistician in Demography, National Center for Health Statistics, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.
Publication: *Monthly Vital Statistics Report, Highlights from the National Center for Health Statistics*, June 14, 1966; also forthcoming detailed report in NCHS Series 21.

20-JG-1 THE ESTABLISHMENT OF A DATA RESERVOIR FOR JUVENILE DELINQUENCY

Purpose: To create a store of data open to social scientists for research projects in juvenile delinquency; to stimulate research in juvenile delinquency; to provide potentiality for development of norms and baselines on variables of concern to institutions, courts, public agencies, schools, and students; to test specific hypotheses of interest to the Berkshire Farm Institute for Training and Research.
Subjects: All boys in the Berkshire Farm population on a continuing basis.
Methods: Data are gathered from case records, psychological tests, and staff ratings; records are systematically culled, psychological tests routinely administered and staff ratings periodically obtained. Items are coded and entered on a summary sheet in preparation for IBM card storage. Project is still exploratory and is planned to include new items and exclude old ones on basis of experience with the system and upon determination of what might be some of the relevant dimensions of juvenile delinquency. When the procedure is functioning smoothly, other institutions in the United States and perhaps abroad will be asked to cooperate with the program.
Duration: October 1964-not reported.
Investigator(s): Monroe M. Lefkowitz, Ph.D., Research Director, Berkshire Farm Institute for Training and Research, Canaan, N. Y. 12029.
Publication: Data will be made available at first informally through request to principal investigator; as project continues, a more formal system will be developed for dissemination of data.

20-JG-2 JUVENILE DELINQUENCY IN TAIWAN

Purpose: To improve judicial administration and to prevent delinquency; to uncover complicated factors contributing to the growth of juvenile delinquency in Taiwan.
Methods: Individual case studies and interviews were used to obtain information on family background, education, and social environment of juvenile delinquents.
Duration: December 1964-June 1965.
Investigator(s): Chau-Yuen Chu, College of Law, National Taiwan University, Taipei, Taiwan, China. (Reported by NCCD.)
Cooperating group(s): Ministry of Justice, Republic of China.

20-JJ-1 TYPES AND PATTERNS OF JUVENILE DELINQUENCY

Purpose: To develop a measure of delinquency that will make it possible to predict delinquent careers from an early portion thereof, or to reconstruct a total pattern of delinquency from that portion known to police; to determine if adult criminal careers may be predicted from various types and patterns of delinquency.
Subjects: Juveniles with police contacts, 1,876 from Madison and 2,191 from Racine, Wisconsin.

Findings: Police contact rates have relatively stable patterns that are associated with social areas of middle-sized cities. Referral rates have increased disproportionately to police contact rates. Increased proportion of police contacts has probably given rise to the mistaken impression that juvenile delinquency is increasing at a higher rate than it is in fact.
Investigator(s): Lyle W. Shannon, Ph.D., Professor and Chairman, Department of Sociology and Anthropology, University of Iowa, Iowa City, Iowa.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-JJ-2 REPLICATION OF GLUECK, S. AND E., *UNRAVELING JUVENILE DELINQUENCY* ON 250 DELINQUENTS AND 250 MATCHED NONDELINQUENTS IN PUERTO RICO

Purpose: To repeat main features of *Unraveling Juvenile Delinquency* in Puerto Rico in order to determine which findings of original study are indigenous to Boston and which may reasonably be regarded as etiologic constants.
Subjects: 250 delinquents and 250 matched nondelinquents in Puerto Rico.
Methods: Intensive social investigation of family and personal background of 250 delinquents and 250 matched nondelinquents, delinquency history, psychiatric interview, psychological testing (Wechsler-Bellevue Form 1), analysis of body build from photographs, using method developed in *Unraveling Juvenile Delinquency*, general medical examination, neurological examination, and Rorschach Test.
Duration: July 1965-June 1971.
Investigator(s): Sheldon Glueck, Ph.D., LL.D., Director, and Eleanor T. Glueck, Ed.D., Co-Director, Research Project into the Causes, Management, and Prevention of Juvenile Delinquency, Harvard Law School, 3 Garden St., Cambridge, Mass. 02138; and Franco Ferracuti, M.D., Professor, Institute of Criminal Anthropology, University of Rome, Rome, Italy, and Director, Program for Training and Research in Criminology, Social Science Research Center, University of Puerto Rico, Rio Piedras, Puerto Rico.
Cooperating group(s): University of Puerto Rico; Government of Puerto Rico (Office of Juvenile Affairs); Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: *Unraveling Juvenile Delinquency*, by S. and E. Glueck. Cambridge, Mass.: Harvard University Press, 1950.

20-JM-1 PERSONALITY PATTERNS OF DELINQUENT, TRUANT, AND WELL-ADJUSTED ADOLESCENT GIRLS AS MEASURED BY PROJECTIVE TECHNIQUES

Purpose: To identify delinquent personality patterns for possible early diagnosis and prevention.
Subjects: 40 delinquent, 28 truant, and 23 well-adjusted adolescent girls, age 12 to 18, all white, native-born.
Methods: Administration of Wechsler scales; 10 selected TAT cards; Rosenzweig Picture-Frustration Test, Adult Form; and an interview concerning social background, school and peer adjustment; collection of data pertaining to school progress and adjustment from school records and institutional records.
Findings: Significant differences in social background: more delinquents and truants come from broken homes than do controls (well-adjusted); more delinquents had previous placements than either of the other groups; fewer belong to formal youth groups. The only significant test difference is in the P-F Group Conformity Rating which is lowest for delinquents.

Duration: 1953-1965.
Investigator(s): Helena W. Temmer, Ph.D., Principal Psychologist, Children's Unit, New Jersey Neuro-Psychiatric Institute, Box 1000, Princeton, N. J. 08540.
Publication: The abstract was submitted for consideration to the Eastern Psychological Association 1966; further plans to be made later.

20-JM-2 COMPARISON OF EXPRESSED ACCEPTANCE OF SELF AND OF OTHERS, AND RESPONSES ON THE BLACKY PICTURES OF TWO ADOLESCENT GROUPS

Purpose: To compare responses of 14-year old delinquent and nondelinquent females on a measure of expressed acceptance of self and of others, and on a measure of psychosexual development, to determine if delinquent females are more self-rejecting.
Subjects: 14-year old delinquent females and matched 14-year old nondelinquent females; comparison group of 14-year old nondelinquent males.
Methods: Subjects receive Berger Questionnaire (self-acceptance), Blacky Pictures, and a new form (female) of Blacky Pictures devised for this study. Responses are compared with nondelinquent groups.
Duration: April 1965-May 1966.
Investigator(s): Sandra A. Robinson (Ed.D. Candidate, University of California at Los Angeles), 816 Victor, No. 5, Inglewood, Calif. 90302. (Reported by May V. Seagoe, Ph.D., Professor and Associate Dean, University of California at Los Angeles.)
Cooperating group(s): San Fernando Valley Juvenile Hall.
Publication: Dissertation and possible publication.

20-JM-3 VALUES OF GANG DELINQUENTS

Purpose: To test hypothesis that values of delinquent gang boys concerning such middle class activities as getting good grades in school, saving money, and reading good books, are not different from those of middle class boys, despite wide difference in overt behavior.
Methods: Detached workers are asked to guess how gang boys would value middle class activities; gang boys are asked to report values of their friends, rather than themselves; gang boys are placed in an Asch-type small group experiment wherein a high-status peer derogates middle class behavior and praises gang behavior--responses of remaining boys are then recorded; values of gang boys as a function of I.Q. and age are examined to see whether they conform to same patterns as do control groups. Appropriate control groups are present in each case.
Duration: Not reported-June 1967.
Investigator(s): Robert A. Gordon, Ph.D., Assistant Professor of Social Relations, Johns Hopkins University, Baltimore, Md. 21218.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-JM-4 THE INTERRELATIONSHIP OF VARIABLES AMONG JUVENILE DELINQUENTS

Purpose: To examine the interrelationship among a large number of variables for a group of institutionalized, delinquent adolescents.
Subjects: 300 boys and 112 girls, admissions to the Utah State Industrial School.

Methods: Use of a biographical inventory consisting of 155 items of information about family background, offenses, and a variety of other social and personal data. Data are gathered from past records, interviews with subjects, and sometimes, with their parents. Variables under study are analyzed by computer and cross-tabulated and intercorrelated, with significant and nonsignificant correlations presented for boys and girls. A factor analysis for variables is scaled in an interval manner to examine whether common relationships exist among the items.
Investigator(s): Harold C. Nielson, Ph.D., Chief, Psychology Research, Veterans Administration Hospital, 16111 Plummer, Sepulveda, Calif.; and Richard C. Sowles, M.S., Chief Psychologist, Utah State Industrial School, Ogden, and University of Utah, Salt Lake City, Utah.
Cooperating group(s): Veterans Administration.

20-JM-5 A STUDY OF THE SUSCEPTIBILITY TO INFLUENCE OF TWO TYPES OF INSTITUTIONALIZED FEMALE DELINQUENTS AS A FUNCTION OF PEER AND ADULT PRESSURE

Purpose: To investigate some behavioral differences between social and neurotic delinquents; to test hypothesis that social delinquents would be more responsive to peer conformity pressures while neurotic delinquents would be more susceptible to adult influence.
Subjects: 150 girls at Wisconsin School for Girls, equated for age, I. Q., racial background, and length of institutionalization.
Methods: Equal numbers of neurotic and social delinquent subjects are randomly assigned to each of the four different experimental treatment conditions, each of which defines a different reference group: (1) an institutional staff adult group; (2) a noninstitutional adult group; (3) a delinquent peer group; (4) a nondelinquent peer group. Three female confederates are used for each condition to give predetermined responses in order to influence the subject's responses in certain ways. Conformity behavior is assessed by two different kinds of behavioral tasks. Prior to any experimental treatment, a measure of each subject's self-esteem was obtained through use of a questionnaire, as conformity and self-esteem seem to be significantly related.
Duration: April 1964-continuing.
Investigator(s): James W. Lewis, Ph.D., and S. E. Feldman, Clinical Services, Wisconsin State Prison, Waupun, Wis. (Reported by NCCD.)
Cooperating group(s): Bureau of Research, Wisconsin Division of Corrections.

20-JM-6 A STUDY OF THE CRIMINALITY OF FEMALE OFFENDERS, FOURTEEN TO EIGHTEEN YEARS OF AGE, IN THE DISTRICT OF LANDGERICHT AT WUPPERTAL, GERMANY, IN 1942-1952

Purpose: To investigate the criminality of female delinquents; to relate trends in this criminality to events happening during the period; and to investigate the intellectual influences affecting laws dealing with youthful female offenders.
Subjects: 1,349 girls, ages 14 to 18.
Methods: Study of incidence of each type of offense and quality of offenses. Investigation into family environment, social background, education, occupation, recreation, motivation, age, and type of each offender.
Findings: In years immediately following World War II, offenses against property were more numerous, but a trend toward dangerous crimes against the person developed. There was also an increase in sex offenses and false accusations. Most subjects were only occasional and casual criminals, motivated by avarice, need for self-assertion, and a search for

thrills. One out of six came from an asocial environment; two out of five came from broken homes; half were school dropouts. Legal punishment became less severe as the years progressed, and there was more emphasis on rehabilitation and education.

Duration: Completed in 1964.

Investigator(s): Dr. Harald Jaeger, Criminological Seminar, Faculty of Law, University of Bonn, Bonn, Germany. (Reported by NCCD.)

20-JM-7 RELATED INCONGRUENCE AND ANXIETY SCALE

Purpose: To specify what kinds of incongruent perceptions are related to anxiety and the nature of the relationship; to lay groundwork for the development of a psychometric instrument to aid in pinpointing the sources of a person's anxiety.

Subjects: 50 consecutively admitted male delinquents at Wisconsin School for Boys, Wales.

Methods: Two questionnaires were administered and the resulting scores correlated. The first is the IPAT Anxiety Scale, a factor-analyzed instrument designed to determine subject's level of "free-floating" anxiety. Second is a set of rating scales in which items likely to be of central emotional importance to the subject (happiness, sadness, mother, father, sex, job, etc.) are rated on two dimensions of value (good-bad) and power (strong-weak). Incongruence score is derived by finding extent to which power ratings exceed value ratings. Basic hypothesis is that an individual who rates emotionally important things as more powerful than good is a more anxious individual.

Duration: August 1964-September 1965.

Investigator(s): James E. Cowden, Ph.D., Research Psychologist, Clinical Services, Division of Corrections, and Paul H. Kusuda, M.A., Social Science Research Analyst, Bureau of Research and Statistics, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)

Cooperating group(s): Wisconsin School for Boys, Wales.

20-JM-8 AN ANALYSIS OF THE RELATIONSHIP BETWEEN AGGRESSIVE FANTASY AND BEHAVIOR IN INSTITUTIONALIZED DELINQUENTS

Purpose: To assess the degree and direction of the relationship between types of fantasy activity, personality traits, and delinquent behavior, particularly assaultive and non-assaultive delinquent behavior; to discover whether violence, as depicted in mass communications media is, as is widely believed, conducive and supportive of various kinds of delinquent behavior.

Subjects: 100 delinquent boys at Wisconsin School for Boys, Wales.

Methods: A questionnaire was administered, containing an exhaustive list of modes in which adolescents spend their spare time. Five additional factors were included which tap disciplinary factors in the delinquent's background. Results were added to counselor ratings of maturity, institutional adjustment, adequacy of the boy's relationship with counselor and peers, and degree of passivity. Ratings were made from Clinical Services reports with regard to degree of susceptibility to particularly destructive and/or assaultive delinquent behavior as engendered by mass communications media. Correlations were then made to determine whether or not boys who have a more serious or extensive history of delinquent behavior spend more time involved in aggressive fantasies than do boys with a relatively less serious or extensive delinquent history.

Duration: January-September 1965.

Investigator(s): Thomas Bassett, Ph.D., Chief Psychologist, and James E.

Cowden, Ph.D., Research Psychologist, Clinical Services, Division of Corrections, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)
Cooperating group(s): Wisconsin School for Boys, Wales.

20-JM-9 RESOURCE SELECTION BY INSTITUTIONALIZED DELINQUENT GIRLS FOR DISCUSSION OF PROBLEMS

Purpose: To determine with whom an institutionalized delinquent girl discusses specific problems, personal, social, and physical; to test hypotheses that (1) subjects will select peers as a resource with whom they can discuss personal problems; (2) subjects will select institutional staff members as a resource with whom they can discuss social problems; and (3) subjects will select no one with whom they can talk about matters of sex-knowledge accretion.
Subjects: 60 girls randomly drawn from three age-group cottages at Wisconsin School for Girls, Oregon.
Methods: Subjects were tested in groups of five. A questionnaire was administered consisting of 45 questions covering the three problem areas. Comparative frequency of each problem area was checked and tabulated as it related to resource, age, and cottage.
Duration: October 1964-June 1965.
Investigator(s): Arthur P. Miles, Ph.D., Professor of Social Work, University of Wisconsin; and Paul H. Kusuda, M.A., Social Science Research Analyst, Bureau of Research and Statistics, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)

20-JM-10 A STUDY OF CHARACTERISTICS OF MALE CALIFORNIA YOUTH AUTHORITY WARDS AS A FUNCTION OF THE TYPE OF COMMITMENT OFFENSE

Purpose: To study characteristics of male California Youth Authority wards as a function of the type of commitment offense.
Subjects: Male wards admitted to the Youth Authority for the first time, in 1961 and 1963.
Methods: Background data were obtained from parole agents' Initial Home Visit Interview Schedule and clinic summaries prepared at the reception center through which the ward was processed. Statistical analysis of each of the many variables was made using Chi-square tests of statistical significance. Initial comparisons were made between wards committed for assaultive offenses (homicide, assault to commit a felony, attempted murder, all other assaults, battery, forcible rape, and attempted rape) and wards committed for all other offenses. Comparisons were also made between assaultive offenders and specific other offender groups such as burglars, robbers, sex offenders, and narcotic offenders. Comparisons will also be made between other specific offender groups.
Findings: The following variables significantly differentiated (at the .05 level or better) assaultive from all other offenders in both samples: race, prior delinquent record, alcohol use, narcotics use, attitude toward school, age at which truancy began, history of nail biting, judgments of emotional ties of the father figure to the ward, and judgments of family cohesiveness. Wards committed for assaultive offenses were generally statistically over-represented in the more positive categories of most of these variables, e.g., less extensive delinquent history, more accepting attitude toward school, and more family cohesiveness.
Duration: Completed in 1965.
Investigator(s): Martin J. Molof, Ph.D., Associate Social Research

Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Publication: Final report by California Youth Authority.

20-JV-1 BARBITURATE, AMPHETAMINE, MARIJUANA, AND LSD TREATMENT PROJECT (BANBAM PROJECT)

Purpose: To develop and test a treatment methodology for effecting abstinence and concomitant productive values and behavior among youthful "soft drug" abusers.
Subjects: About 50 youthful abusers of barbiturates, amphetamine, marijuana, and LSD, as well as glue sniffers, who are on probation or parole or who voluntarily appear at the clinic for treatment.
Methods: "Reality Therapy" as described by Glasser (1965) and implemented by the procedures of Dayton Village, a therapeutic community for drug addicts on Staten Island (Shelly and Bassin, 1964, 1965), is applied on an outpatient basis at the Civic Center Clinic in Brooklyn. Groups are formed which engage in free verbal exchanges under an indigenous leader trained for this project. Professional aides are also involved to provide positive experiences with representatives of the larger society.
Findings: It is felt that an effective technology for treatment of the BAM-LSD population has been created.
Duration: November 1965-November 1970.
Investigator(s): Alexander Bassin, Ph.D., Director of Group Therapy, and Ralph S. Banay, M.D., Medical Director, Civic Center Clinic, 44 Willoughby St., Brooklyn, N. Y.
Cooperating group(s): New York Foundation.
Publication: Two professional papers anticipated in 1967.

20-JV-2 THERAPEUTIC AND LIVING-LEARNING EXPERIENCES FOR CHILDREN WHO ARE HABITUATED TO GLUE-SNIFFING

Purpose: To provide therapeutic counseling for juvenile glue-sniffers.
Subjects: Children who habitually inhale the fumes of model airplane glue and rubber cement, and who have come to the attention of the Juvenile Court.
Methods: Subjects receive intensive or individual counseling and activity planning. Groups are based in neighborhood community centers. Coordinated with these activities are experimental educational instruction and intensive parent involvement. Boys are evaluated medically, psychologically, and sociometrically.
Duration: July 1965-December 1966.
Investigator(s): Judge Ted Rubin and Lester G. Thomas, Denver Juvenile Court, Room 166, City and County Building, Denver, Colo. 80202. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-JV-3 A LONGITUDINAL STUDY OF MARIJUANA AND DANGEROUS DRUG USERS

Purpose: To determine extent of marijuana and dangerous drug use among juveniles as measured by police arrests in a particular jurisdiction; to learn whether there necessarily is a progression from use of marijuana or

dangerous drugs to heroin and other opiate substances; to study interrelationships between a delinquent orientation and marijuana or drug use; to determine characteristics of the users, and pattern of delinquent or criminal activity following a first time arrest for this offense.
Subjects: A cohort of juveniles arrested by the Los Angeles Police Department in 1961 for first time use of marijuana or dangerous drugs.
Methods: Narcotic arrest history of the cohort over a three- to four-year period will be analyzed to determine progression of delinquent and/or criminal behavior. Sociological and case history information is gathered, and interviews are held with as many of the cohort group as can be located.
Duration: 1964-continuing.
Investigator(s): George F. Davis, M.A., Senior Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Cooperating group(s): Bureau of Criminal Statistics, California Department of Justice; Los Angeles Police Department.

20-JY-1 PREVENTIVE INTERVENTION IN ALCOHOL-RELATED CONDITIONS

Purpose: To study the natural history of development of alcoholism in a group of adolescents assumed to be high risks for subsequent development of alcohol pathology; namely, a group of boys whose delinquent behavior is related to use of alcohol.
Subjects: 250 males aged 14 to 16 divided into five groups of 50 each: (1) alcohol-related delinquents evaluated and treated; (2) alcohol-related delinquents evaluated but not treated; (3) alcohol-related delinquents identified but not evaluated or treated until follow-up; (4) nondelinquents; (5) non-alcohol-related delinquents.
Methods: Each subject who is evaluated is given a standard psychiatric examination. In addition, a variety of tests are administered in order to assess the multilevel functioning of dependency as a need state and as a behavior. All measures are related to the developing theory of delinquency that centers around dependency needs. Special treatment methods are being developed for that group of boys with whom intervention is taking place.
Duration: September 1964-August 1969.
Investigator(s): Morris E. Chafetz, M.D., Director, Alcohol Clinic and Acute Psychiatric Service, Massachusetts General Hospital, Boston, Mass.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Results will be published in related professional journals.

20-JY-2 A STUDY OF THE INCIDENCE OF CRIMINAL BEHAVIOR FOLLOWING DISCHARGE FROM THE CALIFORNIA YOUTH AUTHORITY AND ITS RELATIONSHIP TO PREDISCHARGE FACTORS

Purpose: To follow community adjustment of Youth Authority wards after discharge in terms of recorded legal dispositions of police bookings; to attempt to find out if a relationship exists between evaluation at discharge and the ward's official record while with the Youth Authority and later adjustment as measured by these recorded legal dispositions of bookings; to determine length of follow-up necessary to identify any desired percent of lawbreakers within a ten-year period.
Subjects: 4,000 Youth Authority wards discharged in 1953 and 1958.
Methods: Arrest records were obtained, and dispositions of police bookings were recorded on a form which already contained the ward's Youth Authority record. Data are machine processed and analyzed.
Duration: January 1964-continuing.

Investigator(s): Evelyn S. Guttmann (formerly) Assistant Social Research Analyst, and Carolyn B. Jamison, Junior Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)

20-KA-1 RELATION OF SOCIAL CLASS AND TYPES OF DELINQUENCY

Purpose: To explore distribution of three kinds of delinquency--attacks against persons, vandalism, and theft in various socio-economic ranks; to explore relative importance of causal variables of delinquent peer groups, inadequate role models, and indeterminacy of status in producing each kind of delinquency; and to compare self-reported and official rates of delinquency for various school districts.
Methods: Anonymous questionnaires are answered by high school sophomores in communities of various sizes, eliciting responses about face data, including father's occupation as an indicator of socio-economic position, three variables thought to be delinquency producing, and three kinds of delinquent behavior.
Duration: April 1964-June 1967.
Investigator(s): William R. Arnold, Ph.D., Assistant Professor of Sociology, University of Texas, Austin, Tex. 78712.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-KA-2 ETIOLOGY OF THEFTS BY BOYS UNDER SIXTEEN YEARS OF AGE

Purpose: To discover what factors in the personal lives of juvenile thieves made them commit theft rather than another crime or no crime at all.
Subjects: The 70 cases of theft seen by the Juvenile Court Judges at Mons, Belgium in 1964.
Methods: Pre-sentence investigations into personal lives of subjects.
Duration: October 1964-October 1965.
Investigator(s): Paul Lesire, Institut d'Etudes Sociales de l'Etat, 31, Ave. Reine Astrid, Mons, Belgium. (Reported by NCCD.)

20-KA-3 URBANIZATION AND MALE DELINQUENCY IN GHANA, WEST AFRICA

Purpose: To study specific effects of the urbanization process upon male delinquency in the rapidly developing society of Ghana; to test hypotheses that (1) disorganization resulting from urbanization affects the city, adjacent villages, and villages from which the people migrate; (2) delinquent behavior represents a mode of adaptation to urban living by lower class youth who have become alienated from the family and the school system and who, in a marginal social position, turn to deviant peers for guidance.
Subjects: 107 male offenders who had committed crimes against property and who were incarcerated in the Remand School, Accra.
Methods: Interviews; analysis of records; comparison of histories with 95 male students in primary and middle schools in and near Accra. Investigators also visited slum areas and consulted adult Ghanaians on effect of urbanization on family, school, and means of social control.
Findings: Urbanization causes disorganization in family, school system, and local community, and this influences the youth and contributes to

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their recourse to delinquency.
Duration: March 1961-April 1965.
Investigator(s): S. Kirson Weinberg, Ph.D., Chairman, Department of Sociology and Anthropology, Roosevelt University, 430 S. Michigan Ave., Chicago, Ill. 60605. (Reported by NCCD.)
Cooperating group(s): University of Ghana.

20-KA-4 A STUDY OF MALE AND FEMALE DELINQUENTS IN GHANA, WEST AFRICA

Purpose: To compare family background, school behavior, and peer relations of male and female delinquents in Ghana.
Subjects: 107 males and 67 females.
Methods: Review of records of the Remand Home and the Girl's School, and interviews with a large proportion of the inmates.
Findings: Female delinquents emerged from more disorganized families than did male delinquents.
Duration: March 1961-September 1965.
Investigator(s): S. Kirson Weinberg, Ph.D., Chairman, Department of Sociology and Anthropology, Roosevelt University, 430 S. Michigan Ave., Chicago, Ill. 60605. (Reported by NCCD.)
Cooperating group(s): University of Ghana; Accra Department of Welfare, Ghana.

20-KD-1 TREATED AND UNTREATED DELINQUENTS -- FOLLOW-UP

Purpose: To follow up boys in the interference group in seventh grade of eight junior high schools serving high delinquency areas in Columbus, Ohio.
Subjects: Seventh grade boys in Columbus junior high schools.
Methods: Subjects had been given a presentation of models of behavior to strengthen self-image on theory that a stronger self-image could inoculate them against future delinquency. Interference cohort and two control group cohorts covering 1963-64, 1964-65, and 1965-66 will be cleared through school records and records of juvenile bureau of police department to arrive at any differential showing in school performance and delinquency involvement. Study will also determine differential dropout of several cohorts after 16th birthday.
Findings: Incomplete data indicate that treated boys are involved in less serious offenses than untreated boys and show greater improvement in reading and school attendance.
Duration: September 1963-September 1970.
Investigator(s): Walter C. Reckless, Ph.D., and Simon Dinitz, Ph.D., Professors, Ohio State University, Columbus 10, Ohio.
Cooperating group(s): Columbus public schools; Franklin County Juvenile Court; Columbus Police Department.
Publication: Monograph planned in 1970.

20-KD-2 STUDY OF DELINQUENT GANGS

Purpose: To measure the impact of a "detached worker" program on four large clusters of Negro juvenile gangs in Southwest Los Angeles.
Methods: Research observation; daily process and contact records from gang workers; police and probation records gathered over four-year period.
Duration: July 1961-July 1966.

Investigator(s): Malcolm W. Klein, Ph.D., Youth Studies Center, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): Delinquency Prevention Service of the Los Angeles County Probation Department; Ford Foundation.

20-KD-3 CENTER FOR TRAINING DELINQUENT AND PRE-DELINQUENT YOUTH IN DELINQUENCY CONTROL

Purpose: To prepare delinquent and pre-delinquent youth for leadership in their local communities and in the control and prevention of juvenile delinquency among their groups, clubs, gangs, and other associations.
Subjects: Delinquent and pre-delinquent youth from Brooklyn recruited for a summer teen work camp.
Methods: The total experience in camp -- planning sessions; work; program; conflicts; relationships with adults, trainees, and other teen campers; evaluations; conferences; teen government -- is designed to change the direction of the energy output. All experiences and relationships are consciously directed toward angling this change through skill, consistency and integrity in examining the richness of difference, the freedom and responsibility involved in decisions between alternative choices, the goals and identity of youth and the adult society. The test of the curriculum is the internal consistency with the living experience of the teen work camp. Training will continue, at close of camp, at the United Community Centers, Inc., Brooklyn.
Duration: July 1965-June 1966.
Investigator(s): Morris L. Eisenstein, Harold Bardonille, and Fannie P. Eisenstein, United Community Centers, Inc., 819 Van Siclen Ave., Brooklyn, N. Y. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-KD-4 A STRATEGY FOR CURBING DELINQUENCY IN A NEGRO NEIGHBORHOOD

Purpose: To bring about a lessening of delinquent behavior by providing fatherless boys identification with a socially acceptable adult male; to increase effectiveness of the maternal figure as a positive factor in the life of the boy; to increase the strength of the family involved; to aid the neighborhood in organizing a Neighborhood Council which will be responsible for initiating projects to control and prevent delinquency; and to teach work skills.
Subjects: 60 youths in conflict with the authority of the law, schools, or parents, and living in a section of Charleston in which fifty percent of the children live in one-parent matrifocal families. Area has greatest incidence of juvenile delinquency in Charleston.
Methods: A clinical psychologist, social group worker, and community action technician will select and train fifteen stable men of the neighborhood to work as surrogate parents with subjects.
Duration: September 1965-August 1968.
Investigator(s): Sister Mary Anthony, Our Lady of Mercy Welfare Center, 77 American St., Charleston, S. C. 29403. (Reported by NCCD.)
Cooperating group(s): Catholic Charities of the Diocese of Charleston; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-KD-5 THE SOUTH BROOKLYN YOUTH LEADERSHIP PROJECT

Purpose: To reduce juvenile delinquency by reducing inter-group conflict; to improve inter-group relations; to provide meaningful group activities that cut across ethnic barriers and provide hitherto non-existent opportunities for inter-group contact.
Subjects: Teenagers in South Brooklyn.
Methods: Leaders of activities are selected from the informal leadership of the older teenagers. They are trained in recreational and inter-group skills and are paid for their work. Composition and orientation are inter-ethnic. Focus of groups is on shared activities rather than improved inter-group relations that is the desired outcome. Activities are planned to involve parents of the children and peers of the leaders in inter-group experiences in the hope that such experience will provide the basis of cooperative endeavor among both adults and adolescents to improve and integrate their community. Evaluation of initial summer experiences will be in terms of inter-group contacts and consequences. Natural groupings will be described and observed for incidents and change (if any) as a result of interaction with members of other ethnic groups.
Duration: Reported February 1966.
Investigator(s): Susan Harwig, Assistant Boro Community Coordinator, and Judith R. Kramer, New York City Youth Board, 210 Joralemon St., Rm. 1101, Brooklyn, N. Y. 11201. (Reported by NCCD.)
Cooperating group(s): South Brooklyn Improvement Council; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-KG-1 POLICE DECISION-MAKING WITH JUVENILES

Purpose: To determine criteria used by police officers when in process of exercising their discretion as to how to dispose of apprehended juvenile offenders.
Subjects: All juvenile offenders contacted by the Detroit Police Department Youth Bureau between the years 1952 and 1961, consisting of some 26,464 boys between 10 and 16 years of age who have some 59,759 contacts with the police.
Methods: Correlates of disposition decisions with analysis by 7094 computer.
Duration: February 1965-June 1966.
Investigator(s): David J. Bordua, Ph.D., Associate Professor of Sociology, University of Illinois, Urbana, Ill. (Reported by James W. Harris, Ph.D. Candidate, Department of Sociology, University of Illinois.)

20-KG-2 A STUDY OF FOUR CASES OF UNGOVERNABLE PRE-ADOLESCENTS HANDLED BY THE JUVENILE COURT

Purpose: To evaluate relationships between the social worker, the children, and their parents in order to rehabilitate the boys.
Subjects: Four ungovernable pre-adolescents randomly selected from among cases handled by the Juvenile Court; (cases referred to the court through complaints filed by the parents.)
Methods: Psychological study of the personality and family milieu of the children; study of court records; interviews with parents and children.
Duration: October 1963-October 1964.
Investigator(s): Jacqueline Maison, and Annie Culot, Professor, Institut d'Etudes Sociales de l'Etat, 31, Ave. Reine Astrid, Mons, Belgium.

(Reported by NCCD.)
Cooperating group(s): Juvenile Court, Mons, Belgium.

20-KG-3 A STUDY OF FAMILIES WHO HAVE LOST PARENTAL RIGHTS DUE TO COURT CONTACT

Purpose: To study factors leading to loss of parental rights.
Subjects: Families living in Anvers, Belgium, who came to the attention of the court in 1957, 1958, and 1959.
Methods: Data derived from social observation of families who had lost parental rights were compared with data derived from social observation of families who had no loss of parental rights.
Findings: The assistance of a social worker prior to court contact was a major factor in enabling a family to retain its parental rights. Many more families lost parental rights than retained them, an indication of the need for expanded social work assistance to families prior to court contact.
Duration: October 1964-July 1965.
Investigator(s): Beatrice Van Peel, Division of Child Welfare, Belgian Ministry of Justice, Anvers, Belgium. (Reported by NCCD.)
Cooperating group(s): School of Social Work, Anvers.

20-KG-4 INTENSIVE SUPERVISION UNIT RESEARCH PROJECT

Purpose: To evaluate effectiveness of an intensive supervision unit in New York City offering casework services to boys on parole to the New York State Training School System, during a three-year period.
Subjects: Approximately 200 youngsters ages 14 to 17.
Methods: The caseloads numbered between 20 and 30 boys. Experimental subjects and control groups of typical parolees are compared on a number of variables. Data are obtained through a field survey including use of selective questionnaires and interviews. Appropriate statistical analysis is applied to obtain information on (1) process of selecting youngsters for the unit, (2) nature of services provided to unit youngsters and their families, and (3) relationship of (1) and (2) to final case disposition for the population groups.
Duration: July 1965-continuing.
Investigator(s): Dr. Harry Posman, Director, Social Research, New York State Department of Social Welfare, 112 State St., Albany, N. Y. (Reported by NCCD.)

20-KG-5 AN INITIAL HOME VISIT RESEARCH SCHEDULE COMPARISON OF MALE AND FEMALE CALIFORNIA YOUTH AUTHORITY WARDS

Purpose: To compare Youth Authority wards of both sexes in terms of the variables of the Initial Home Visit Research Schedule; to report any differential parole performance between the sexes with respect to the different variables.
Subjects: Four combined admission cohorts (1960-1963), and 1962 parole release cohorts.
Methods: Percent distributions by categories of each of the IHV variables were obtained. Parole performance data were obtained from 1961 and 1962 parole release cohorts.
Findings: In general, girls appear to have less favorable home and background situations than boys.

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Duration: Completed in 1965.
Investigator(s): Evelyn S. Guttmann (formerly) Assistant Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Publication: Full report published by California Youth Authority.

20-KG-6 THE MARSHALL PROJECT: ASSESSMENT OF A THERAPEUTIC LIVING UNIT AT A CALIFORNIA YOUTH AUTHORITY RECEPTION CENTER

Purpose: To assess the parole adjustment of wards released from the Marshall Program as compared to that of releasees from other Youth Authority Programs; to ascertain what types of wards, as defined by socio-psychological characteristics, tend to benefit from a program of short-term residential treatment; to identify factors in the treatment process which have a significant impact upon the post-release adjustment of wards.
Subjects: Wards admitted to the Southern Reception Center-Clinic and meeting the following criteria: (1) first admission to the Youth Authority, (2) 15 to 17-1/2 years old, (3) home residence within 90 miles of the Reception Center-Clinic, (4) no evidence of serious emotional disturbance or of need for psychiatric treatment in the institution, (5) no commitment offense which is so serious as to require a stay in a Youth Authority institution for a period longer than 90 days, (6) ineligible for direct release to parole, (7) no extensive history of drug usage, sexual deviation, serious assaultive behavior, or high escape potential, and (8) willingness of parents to attend counseling sessions.
Methods: Subjects stay for 90 days and participate in a half-day work program, class discussions dealing with problems of parole adjustment, small group sessions and daily living unit meetings, and opportunities to go home on week-end passes for progressively longer periods. Counseling sessions for parents are led by Marshall Program social workers. Panel interviews are employed to focus on manifest changes in self-concepts and interpersonal relations and to estimate to what extent boys are accepting values and goals stressed in the Program. The Jesness Inventory and an impact questionnaire are administered on a pre- and post-test basis to tap group differences and individual changes in orientation toward self, peers, staff, program, and prospects for adjustment on parole. Rating scales are applied to secure staff evaluations as to level and degree of involvement of wards in major treatment activities -- counseling sessions, living unit, school, work, and pass programs. A series of sociometric tests are administered every six weeks to all wards in the program. Information on post-release adjustment is maintained on wards paroled from the Program and on those paroled from regular institutions as control subjects. A record is kept of parole violations as well as qualitative adjustment in the community in areas of school, employment, and extent of association with delinquent peers. It is planned to follow each ward 15 months after release from the institution.
Duration: November 1964-continuing.
Investigator(s): Joachim P. Seckel, M.A., and Chester F. Roberts, M.A., Associate Social Research Analysts, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)

20-KG-7 ASSESSMENT OF THE FREMONT PROJECT: A THERAPEUTIC LIVING UNIT

Purpose: To compare the regular institutional program and the work-therapy program of the Fremont unit at the Southern Reception Center-Clinic of the

California Youth Authority to assess the quality of parole adjustment associated with each.
Subjects: Wards entering the Southern Reception Center-Clinic and meeting following criteria for eligibility: (1) minimum age of 16, (2) minimum academic achievement level of 7.0, (3) evidence of willingness to accept work responsibility, (4) capacity to participate positively in group living and to respond to influence of the group, (5) no extensive history of running away, use of drugs, sexual deviation, or serious assaultive behavior.
Methods: Eligibles were assigned randomly to Fremont and to regular institutions. The Fremont program involved a supervised work program, an academic program, and a combination of individual therapy, group therapy, and living-unit meetings. To foster a broader understanding of the outside community, Fremont wards were taken on trips to junior colleges, industrial plants, and other places of cultural interest, as well as to places of recreation. Following release from Fremont and from the regular program, the two cohorts have been compared periodically on parole performance. Major criteria of performance are return to custody and unfavorable discharge from Youth Authority jurisdiction.
Findings: Twelve months after parole, approximately 19 percent of the 75 Fremont subjects and 20 percent of the 51 control subjects were revoked from parole.
Duration: September 1951-1965.
Investigator(s): Joachim P. Seckel, M.A., Associate Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)

20-KG-8 ASSESSMENT OF THE VIOLENCE CONTROL DEMONSTRATION UNITS OF THE CALIFORNIA YOUTH AUTHORITY, DIVISION OF PAROLE

Purpose: To provide statistical descriptions of the operations of the Violence Control Demonstration Unit; to validate previously designed "workload" measures by means of time studies; to provide a content-analysis of descriptions of violent offenses that occur in the project.
Subjects: Two parole units, each supervising 200 wards.
Methods: All male wards currently on parole in designated area of San Diego and all male wards regularly released to parole in the area are included in the Violence Control Demonstration Unit. Caseloads average 30 wards per agent as compared to regular parole caseloads of 70, providing greater intensity of parole services possible for each ward. Violence Control Demonstration Unit attempts to reduce violent behavior rather than recidivism, *per se*.
Duration: November 1964-continuing.
Investigator(s): Bertram M. Johnson, A.B., Senior Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Cooperating group(s): Division of Parole, California Youth Authority.
Publication: Yearly reports to be issued.

20-KJ-1 A STUDY OF SOCIAL SERVICES PROVIDED THE ALLEGED AND ADJUDICATED DELINQUENT CHILD BY COUNTY AGENCIES

Purpose: To identify the level of service provided the delinquent child, thereby enabling the state agency to modify its program of supervision and consultation services to these county agencies.
Subjects: 25 counties selected for study.

Methods: Record reading; interviewing; inspection; evaluation of supervision of delinquent children; and provision of intake services for the juvenile court.
Duration: November 1965-November 1966.
Investigator(s): Robert A. Ganser, M.S.S.W., Supervisor; Ozzie Stern, M.S.S.W., Consultant, Administrative Studies Unit; and Joseph Lehnen, M.S.S.W., County Services Supervisor, Division for Children and Youth, State Department of Public Welfare, Madison, Wis. 53702.

20-KM-1 THE PRESTON TYPOLOGY STUDY

Purpose: To explore the usefulness of a delinquency typology in a California Youth Authority institution.
Subjects: Delinquent boys from 15 to 18 years of age, committed to the California Youth Authority and assigned to the Preston School of Industry, Ione, Calif.
Methods: Interviews and psychological inventories serve as primary tools for classifying boys into one of six subtypes (derived from the Interpersonal Maturity Classification System). Once classified, boys are assigned to an experimental living unit where a unique treatment milieu is established. An evaluation of outcomes, through tests, behavior reports and recidivism rates, will be compared between subtypes who have lived in experimental units with specific typology-related treatment and subjects of the same subtype assigned to a "regular" non-homogeneous control unit.
Duration: September 1965-March 1968.
Investigator(s): Carl F. Jesness, Ph.D., Senior Behavioral Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814.
Cooperating group(s): Institute of the Study of Crime and Delinquency; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-KM-2 DIFFERENTIAL TREATMENT ENVIRONMENTS FOR DELINQUENTS (DTED) PROJECT

Purpose: To determine feasibility of establishing five types of group homes--with each of the five representing a type of environment specific to growth and development needs of particular types of delinquent youth; to develop a taxonomy of treatment environments; and to evaluate impact of group home experience on children assigned to them.
Subjects: Male Juvenile Court commitments to the California Youth Authority, aged 13 through 19, who serve as.experimental subjects within the Youth Authority's Community Treatment Project.
Methods: Tentative, theoretical descriptions of the five types of group homes (protective, containment, boarding, temporary community care, and short term restriction) have been developed from prior foster home experience with the nine subtypes of delinquents identified by the Interpersonal Maturity Level classification used in the Community Treatment Project. Based upon this system of classification, youths are assigned to their particular, theoretically appropriate group home placement as part of their regular, initial staffing procedure. Placement into each of these homes is planned rather than based upon random assignment. Descriptive and evaluative research data are collected in two major areas: (1) characteristics of study subjects, and changes in these characteristics during course of program, and (2) characteristics of and changes through time within the five environments (including the group home parents) being developed. A variety of psychometric, observational, and personal inter-

view techniques and instruments are utilized.
Duration: April 1966-March 1969.
Investigator(s): Theodore B. Palmer, Ph.D., Principal Investigator, DTED Project and Co-investigator, Community Treatment Project; and Doyle L. Roberts, M.A., Supervisor of Community Treatment Project and Co-investigator of DTED Project, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814.
Cooperating group(s): State of California; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Progress reports; reports in professional journals.

20-KM-3 THE INSTITUTIONAL MANAGEMENT OF ISLAM'S APPEAL TO LOW-STATUS DELINQUENT BOYS

Purpose: To achieve a rational management policy based on clinical evaluation of the Brother Movement among adolescent Puerto Rican and Negro boys.
Subjects: 14- and 15-year old delinquents committed to a state training school.
Methods: I.E.S. test and Cattell H.S.P.Q. administered to White, Puerto Rican, and Negro boys, "brothers" and non-"brothers."
Duration: November 1965-spring 1967.
Investigator(s): Daniel P. Clarke (D.P.A. Candidate, State University of New York), Senior Clinical Psychologist, Warwick State Training School for Boys, Warwick, N. Y. 10990.
Cooperating group(s): Graduate School of Public Affairs, State University of New York.

20-KM-4 STUDY OF THE POSSIBILITIES FOR SUCCESSFUL SOCIAL INTEGRATION OF YOUNG FEMALE DELINQUENTS

Purpose: To determine optimum treatment for delinquent girls individually and as a group; to learn which criteria were most influential in determining type of treatment.
Subjects: 30 delinquent girls placed in a training school by a juvenile court.
Methods: Investigation of court record, institutional behavior, family and home environment.
Duration: October 1964-October 1965.
Investigator(s): Bernadette Demay, Institut d'Etudes Sociales de l'Etat, 31, Ave. Reine Astrid, Mons, Belgium. (Reported by NCCD.)
Cooperating group(s): Children's Department, Belgium.

20-KM-5 CONTINGENCIES APPLICABLE TO SPECIAL EDUCATION (CASE)

Purpose: To utilize events or situations that can initiate, maintain, and increase or decrease behaviors, to increase the educational performance of student-inmates.
Subjects: Student-inmates at National Training School for Boys, randomly assigned to CASE.
Methods: Subject matter and schedules are rearranged based on individual or group performance requirements, and certain areas of reinforcement

normally operating in non-academic environments (a lounge with amusement machines, etc.) will be used as contingencies to increase motivation. CASE will also hold a weekly seminar and training lab sessions with the correctional officers and teachers.
Duration: Reported September 1965.
Investigator(s): Harold L. Cohen, Director, Institute for Behavioral Research, Inc., 2426 Linden Lane, Silver Spring, Md. (Reported by NCCD.)
Cooperating group(s): National Training School for Boys, District of Columbia; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-KM-6 THE SAM A. LEWISOHN START CENTER AFTERCARE TREATMENT PROJECT

Purpose: To determine whether (1) continuity of care is more effective than segmented services; (2) it is feasible to use ex-offenders as an adjunct to professional staff; (3) there is any therapeutic value in using an ex-offender as an adjunct to professional staff.
Subjects: Boys in residence at Sam A. Lewisohn START Center.
Methods: A full-time aftercare director establishes contact and relationships with the boys soon after their admission to the Center, gains their confidence, and becomes familiar with treatment approaches initiated at the Center. He maintains this relationship after the boy leaves the START Center. Recent graduates of the Center are hired to work under the supervision of the aftercare director both in the residential facility and in the communities to which other graduates are returned after release from the Center. Workers sensitize and alert aftercare director to community adjustment of other graduates, and thus, to real effects of the treatment program. Workers are trained in interviewing skills, selected observations, report writing, and utilization of community resources. This aspect of the project seeks to destroy cultural and attitudinal barriers between treatment staff and delinquent youths. Analysis and evaluation of project and techniques are carried out.
Duration: May 1964-May 1966.
Investigator(s): Wilson Gonzalez, New York State Division for Youth, 155 Washington Ave., Albany; and Daniel P. Clarke, M.A., Senior Clinical Psychologist, Warwick State Training School for Boys, Warwick, N. Y. 10990. (Reported by NCCD.)
Cooperating group(s): The New York Foundation; The New York State Division for Youth.

20-KM-7 A COMPARATIVE ANALYSIS OF THE SIXTEEN PERSONALITY FACTOR TEST VERSUS THE MINNESOTA COUNSELING INVENTORY IN PREDICTING THE INSTITUTIONAL ADJUSTMENT OF DELINQUENT BOYS

Purpose: To compare the Sixteen Personality Factor Test and the Minnesota Counseling Inventory in terms of their relative efficiency as predictors of institutional adjustment and in terms of their ability to successfully differentiate among subtypes of institutionalized delinquents.
Subjects: 150 consecutively admitted delinquent boys at Wisconsin School for Boys, Wales, from October through December 1964.
Methods: Both tests were administered and results compared with various external criteria, i.e., counselor ratings of maturity, institutional adjustment, and adequacy of boys' relationships with counselors and peers. Results were also compared with clinical services prognostic ratings, as well as ratings of affective responsiveness, maturity, neurotic features, personality trait, pattern disturbances, and sociopathic features. The

relationship of scale scores on each test to the above criteria was first assessed to determine which existing scales on the two tests best predict the kinds of personality adjustment problems determined from clinical services ratings and which best predict the boys' behavior and interpersonal relationships within the institution, as determined from counselor ratings. Second, an item analysis, comparing responses of subjects on each item successively with the above criteria, was completed on each test to determine whether additional scales can be derived to predict the above criteria better than existing scales. The item analysis procedure involved deriving the scales on one-half of the subjects randomly selected out of the total group and then assessing the predictive efficiency of these scales using the other 75 subjects.
Duration: August 1964-September 1965.
Investigator(s): James E. Cowden, Ph.D., Clinical Research Psychologist, Clinical Services, Division of Corrections, and Paul H. Kusuda, M.A., Social Science Research Analyst, Bureau of Research and Statistics, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)
Cooperating group(s): Wisconsin School for Boys, Wales.

20-KM-8 AN ANALYSIS OF THE ATTITUDES AND RESPONSES OF PARENTS OF INSTITUTIONALIZED DELINQUENT GIRLS

Purpose: To analyze response patterns of parents of different types of delinquent girls, i.e., individual (neurotic) vs. social delinquents.
Subjects: Parents of 30 individual delinquents (essentially neurotic girls whose personality problems may have contributed to their delinquent behavior); 30 social delinquents (girls whose delinquent behavior is primarily related to their involvements with delinquent peers); and 30 normal controls (high school girls). Only girls who volunteered and had both parents available for testing were included in the study.
Methods: A structured situational interview was utilized to measure parental dominance, conflict, and the parents' verbalized methods of handling various situations which relate to adolescent girls. Each parent was interviewed alone, then both parents together. A standard series of situations was presented, and responses and interactions of the parents were tape-recorded and subsequently transcribed into a written record, from which operational measures of dominance and conflict were derived. A content analysis and questionnaire yielded the attitudinal measures. While one parent was being interviewed, a paper and pencil questionnaire was given to the other. This questionnaire contained revised items from the Stanford Parent Questionnaire developed by Winder and Rau. Parents were interviewed when they came to the institution to visit their daughter.
Duration: July 1964-July 1965.
Investigator(s): Mavis Hetherington, Ph.D., Associate Professor of Psychology, University of Wisconsin; Paul H. Kusuda, M.A., Social Science Research Analyst, Bureau of Research and Statistics, Wisconsin State Department of Public Welfare; and Asher R. Pacht, Ph.D., Chief, Clinical Services, Division of Correction, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)

20-KM-9 A STUDY OF THE SCHOOL ADJUSTMENT OF JUVENILE DELINQUENTS AFTER A RANCH SCHOOL EXPERIENCE

Purpose: To determine whether the work experience-remedial education rehabilitation program of the William F. James Boy's Ranch II in Santa

Clara, Calif. contributes to a positive change in the boys' achievement, punctuality, behavior, attitude, and attendance when they return to public school.
Subjects: Experimental group selected from all 13- to 15-year old male wards of the Santa Clara County Juvenile Court who were committed to the Ranch in 1961-1962, and control group, matched on eight variables, selected from same group, but who did not receive the Ranch treatment.
Methods: Two groups were compared on change in school performance during 1963-1964 school year, as compared to school performance in school year preceding the delinquent act that brought them into the study.
Findings: Composite picture of the Ranch graduate in school in 1964 shows a boy who tends to be a minor tardy problem, goes to school four or five days a week, makes "D" grades, has an improved attitude, but still must be disciplined cautiously. In terms of the vast majority of students in school, he is still a problem, but in terms of the population receiving treatment from juvenile authorities for delinquency, the Ranch seems to be a success.
Duration: March-September 1964.
Investigator(s): Duane L. Bay, 2261 Columbia, Palo Alto, Calif. 94306. (Reported by NCCD.)
Cooperating group(s): Stanford University; William F. James Boy's Ranch II, Santa Clara County, Calif.

20-KM-10 UTILIZATION OF OLDER CALIFORNIA YOUTH AUTHORITY WARDS AS AIDES FOR YOUNGER WARDS AT AN INSTITUTION

Purpose: To demonstrate the feasibility of employing selected and trained older wards in helping relationships in an institution for younger wards; to explore rehabilitative effects accruing to wards utilized as helpers and to younger wards being helped.
Subjects: Eligible youths selected from among Preston School of Industry wards, 17 to 20 years old, high school graduates, good custodial risks without prior histories of sexual misconduct or of arson, and with a minimum of four months of stay left at the institution.
Methods: Ward aides are chosen at random and trained in techniques of tutoring, officiating at various games, assisting in hobby craft activities, and generally interacting with younger wards to help them adopt more mature and non-delinquent attitudes. Feasibility will be appraised partly in terms of level of performance and skill exhibited by aides in carrying out their duties. Ability to cooperate with staff in resolving operational problems will be considered. Cost of employing and maintaining aides as compared to cost of regular institutional stay at Preston will be analyzed.
Duration: 1965-continuing.
Investigator(s): Joachim P. Seckel, M.A., and Chester F. Roberts, M.A., Associate Social Research Analysts, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)

20-KM-11 A COMPARATIVE ANALYSIS OF ATTITUDES AND INTERACTIONS OF PARENTS OF MALE AND FEMALE INSTITUTIONALIZED DELINQUENTS

Purpose: To analyze differential responses of the parents of two types of institutionalized male and female delinquents termed individual delinquents and social delinquents; to make a special analysis of parental dominance, conflict, and parents' verbalized methods of handling various situations which relate to adolescence.

Subjects: The parents of 30 individual delinquents, thirty social delinquents, and thirty normal controls for each sex.
Methods: Each parent is interviewed alone, then both parents together. While one parent is being interviewed, the other is given a pencil and paper questionnaire containing revised items from the Stanford Parent Questionnaire developed by Winder and Rau. A combination of parametric and selected non-parametric statistics will be used to analyze data.
Duration: June 1965-June 1967.
Investigator(s): Mavis Hetherington, Ph.D., Associate Professor of Psychology, University of Wisconsin; and Paul H. Kusuda, M.A., Social Science Research Analyst, Bureau of Research and Statistics, State Department of Public Welfare, Madison, Wis. 53702. (Reported by NCCD.)

20-KM-12 SYSTEMATIZING COTTAGE TREATMENT OF DELINQUENT WARDS

Purpose: To develop a systematic, social-psychological conceptualization of environmental treatment in institutions for delinquent adolescents, where primary responsibility for fostering change typically resides in non-professional, minimally-trained cottage parents.
Subjects: Delinquent adolescents.
Methods: An attempt will be made to specify and interrelate critical situations and treatment techniques pertinent to cottage life in ways that can be understood and applied by the cottage staff. Preliminary data are gathered from cottage parents and others through the Critical Incident Technique and through participant observation, including both ecological and natural history methods. Resulting schema will be further refined through "Analytic Induction," related to the "research and development" approach used in industry. Project attempts to increase basic knowledge of environmental treatment while also providing an appropriate quasi-theoretical frame of reference within which a cottage staff can identify and work effectively with critical treatment opportunities.
Duration: September 1965-August 1967.
Investigator(s): Jerome Beker, Ed.D., Senior Research Associate, Youth Development Center, Syracuse University, 926 S. Crouse Ave., Syracuse, N. Y. 13210. (Reported by NCCD.)
Cooperating group(s): Berkshire Farm Institute for Training and Research, Berkshire Farm for Boys, N. Y.; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Presentation of the new schema, casebook, and research report planned.

20-KP-1 ASSESSMENT OF THREE TYPES OF GROUP COUNSELING IN A YOUTH TRAINING SCHOOL: THE PASO ROBLES PROJECT

Purpose: To evaluate effect of various types of cottage counseling on ward attitudes, institutional adjustment, and performance on parole.
Subjects: California Youth Authority wards, median age 16, assigned at random to four cottages upon intake at Paso Robles School for Boys.
Methods: One cottage served as control, one cottage provided only small group counseling, one cottage provided only cottage meetings, and one cottage provided a combination of small group counseling and cottage meetings. In the small group meetings, six or eight boys met once weekly with a cottage staff member. These groups were "closed" with constant membership until attrition forced the merging of remnants. The cottage or community meetings included the 50-boy cottage populations and on-duty staff. Boys served as monitors or moderators of the cottage meetings in

rotation. Before-after measurements were made on the Jesness Inventory. Incident data and other intramural performance data were collected. At periodic meetings with group leaders, tape recorded conferences produced data on content and form of the small group and cottage meetings.
Findings: The treatment cottages showed improved climates and improved behaviors relative to the control cottage. The effect was most pronounced in the cottage with the combined treatments.
Duration: July 1960-1965.
Investigator(s): Joachim P. Seckel, M.A., Associate Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Cooperating group(s): Paso Robles School for Boys.
Publication: Final research report published by California Youth Authority.

20-KP-2 ASSESSMENT OF GROUP COUNSELING IN A YOUTH TRAINING SCHOOL

Purpose: To determine effects of non-directive small group counseling on older California Youth Authority wards at the Youth Training School.
Subjects: Male wards, median age 19, assigned randomly at intake into four living units accomodating 50 boys each.
Methods: Two living units of 10 boys each received group counseling once weekly from living unit supervisors while the two other groups served as controls. The groups were "open", admitting new members at any time in the history of the group. Counseling continued for duration of stay at the training school, approximately nine months. Pre-test and post-test data were collected by means of the Jesness Inventory. Post-release performance data were collected systematically from files of the Records and Statistics section. Effectiveness of treatment was measured by changes in ward attitudes and by performance on parole.
Findings: Boys in counseled units showed generally better attitudes and behaviors; communication between boys and staff improved considerably; staff gained valuable insights into motivations and behaviors in particular instances; boys gave frequent evidence of new insights into personal problems.
Duration: July 1960-1965.
Investigator(s): Joachim P. Seckel, M.A., Associate Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif. 95814. (Reported by NCCD.)
Publication: Findings to be published in final research report.

THE CHILD IN THE FAMILY

Family relations

20-LA-1 PARENTAL FACTORS RELATED TO CREATIVITY IN CHILDREN

Purpose: To test hypotheses concerning parental behaviors associated with various degrees of test-measured creativity; to investigate efficacy of observation of structured situations as a means for collecting data on parent-child relations.
Subjects: 60 third grade children and their parents. Children were equally divided as to sex, were of middle class background, and scored high, middle, and low on the Minnesota Tests of Creative Thinking.
Methods: Subjects and their parents were observed interacting in a series of structured situations. Behaviors were categorized using an Esterline Angus recorder.
Findings: In the population from which the sample was drawn, children from one and two-child families were significantly more creative, as were oldest and only children.
Duration: September 1964-August 1966.
Investigator(s): Joan Aldous, Ph.D., Department of Family Studies and Sociology, University of Minnesota, Minneapolis, Minn.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-LA-2 A METHOD FOR ANALYZING FAMILY INTERACTION FROM VIDEO TAPES

Purpose: To adapt a previously developed method for analyzing audio family interaction tapes for use with video tapes.
Subjects: One nonclinical family.
Methods: Use of several judges to evolve categories and establish their reliability; development of an IBM information retrieval program for processing of data.
Duration: February 1966-February 1967.
Investigator(s): Helene Borke, Ph.D., Research Associate, Western Psychiatric Institute and Clinic, 3811 O'Hara St., Pittsburgh, Pa. 15213.
Publication: Publication in a professional journal.

20-LA-3 THE EFFECTS OF CERTAIN PARENT-CHILD INTERACTION PATTERNS ON THE CHILD'S EMANCIPATION FROM HIS EARLY DEPENDENCE ON HIS PARENTS: A LONGITUDINAL STUDY

Purpose: To test the hypotheses that reciprocal trust between parent and child promotes, and that lack of trust retards, the child's emancipation.
Subjects: 100 children from the age of 2 years, 9 months to 12 years. Each year 20 children entering the Institute of Child Study School are incorporated into the study and followed until they graduate from grade six.
Methods: The basic tool is an Emancipation Appraisal at regular intervals. This appraisal is based on parent interview material which systematically

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samples parent-child interacting in the various areas of the child's life. The interactions are judged by experts trained to apply certain operational criteria of reciprocal trust. The various interaction patterns are combined to give an overall assessment of the child's emancipation. A Picture Test of Dependence-Independence has been developed to tap the child's own feelings of self-reliance at home and at school. The influence of the child's emancipation in the home on his progress beyond the home is judged by comparing this with his school adjustment as rated by teachers; his academic achievement, and his sociometric status.
Findings: A preliminary finding suggests that the child who lacks parental care (due to neglect, over-high parental expectation, rejection) and who tries to get along without help makes fewer independent choices on the Picture Test than do children who are acceptant of some parental care. A sex difference in the number of independent choices on the Picture Test begins to appear at Grades II and III. Girls are more dependent - perhaps a reflection of a cultural expectation.
Duration: 1962-1974.
Investigator(s): Carroll Davis, M.A., Research Associate, Institute of Child Study, University of Toronto, Toronto, Ont.
Cooperating group(s): Ontario Mental Health Grant.
Publication: Room to Grow, A study of parent-child relationships. Toronto, June 1966, University of Toronto Press.

20-LA-4 FAMILY AND SCHOOL INFLUENCES ON THE EDUCATIONAL ASPIRATIONS OF WORKING-CLASS AND MIDDLE CLASS NINTH GRADE BOYS

Purpose: To test some hypotheses about the relationship between educational aspirations of ninth grade boys and those their parents have for them; to investigate conditions under which parents are successful or unsuccessful in transmitting their aspirations to their children; to test finding in a previous study of eighth graders that parental aspirations counteract potential influence of school on children's aspirations; to determine by comparison of data obtained from boys and their parents how much confidence can be placed in data obtained from either alone; and to collect data on ninth grade boys which can be evaluated in five years for its usefulness in predicting their final educational level.
Subjects: 1,400 boys and the parents in 300 of their families.
Methods: Questionnaire data from boys and interview data from the parents. Academic grades and I.Q.'s of boys are secured from school records.
Duration: Not reported-September 1967.
Investigator(s): Paul Wallin, Ph.D., Professor of Sociology, and Freda B. Wallin, B.A., Research Associate in Sociology, Stanford University, Stanford, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-LD-1 SINGLE PARENT FAMILIES

Purpose: Comparative study of three major categories of single parenthood: widowed fathers and mothers, divorced mothers, and unwed mothers.
Subjects: All mothers within the age category of 20 to 49, widowed in 1962, with at least one child under 18; all fathers in the above circumstances; all mothers within the age category of 20 to 49, divorced in 1962, with at least one child under 18; and all unwed mothers in the above age category who decided to keep child born during the year 1962.
Duration: November 1964-1967.

Investigator(s): Jetse Sprey, Ph.D., Associate Professor of Sociology, Western Reserve University, Cleveland, Ohio 44106.
Cooperating group(s): Social Security Administration, U. S. Department of Health, Education, and Welfare.
Publication: Research papers are planned along the line of progress; monograph is planned for final presentation.

20-LG-1 ECONOMIC STATUS, UNEMPLOYMENT, AND FAMILY GROWTH

Purpose: To study important aspects of relation of economic status to family growth in the Detroit area, focusing on patterns and dynamics of family composition and growth and how they are affected by both initial and shifting economic status.
Subjects: A cross-sectional sample of 1,300 white married women in the Detroit Metropolitan Area at selected stages in the family life cycle. This includes women who became married in June 1961, or had a first, second, or fourth child in July 1961.
Methods: An intensive interview taken in 1962 covered many phases of family life and history, information regarding respondents' family expectations and preferences, their pregnancy histories, and a wide range of social and economic variables. Two follow-up interviews--chiefly by telephone--with the same women over a two-year period were conducted to determine changes in family situation and plans. Multivariate analysis of data obtained has emphasized relation of economic factors to fertility behavior.
Findings: In the aggregate, there is remarkable consistency of expected family size over time; current income is not related to expectations, but is highly important for timing of demographic events; family size expectations are influenced by the couple's perceptions of its economic position and decisions it makes about family expenditures, quite apart from effect of objective income itself; spacing of children, and in particular pregnancy status at marriage, is highly related to income and asset position the couple achieves.
Duration: November 1962-August 1965.
Investigator(s): Ronald Freedman, Ph.D., Professor of Sociology, and Director, and Lolagene C. Coombs, M.A., Research Associate, Population Studies Center, University of Michigan, Ann Arbor, Mich.
Cooperating group(s): Social Security Administration, U. S. Department of Health, Education, and Welfare.
Publication: Public Opinion Quarterly, Vol. 28, Spring 1964; Demography, Vol. 2, 1965; Population Studies, in press; Milbank Memorial Fund Quarterly, in press; and other articles submitted for publication.

20-LJ-1 THE INFLUENCE OF PARENTAL PSYCHOSIS ON CHILD DEVELOPMENT

Purpose: To inquire into vulnerability factors at work causing degrees of disturbance among children in the family.
Subjects: Children of psychotic parents and a control group of children of parents with chronic physical illness.
Methods: Naturalistic exploration of family environment; also Piaget-type tests of thinking, Witkin-type tests of perceiving, and psycho-physiological investigation.
Findings: Pilot findings indicate that age and sex of children may play a crucial role in producing a disturbance.
Duration: February 1956-1971.
Investigator(s): E. James Anthony, M.D., Professor of Child Psychiatry, Medical School, Washington University, St. Louis 6, Mo.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Report on small pilot investigation being prepared for press.

20-LJ-2 CHILDREN OF POST-HOSPITAL MENTAL PATIENTS: A DESCRIPTIVE STUDY

Purpose: To describe family structure of ex-state hospital patients, focusing on number of minor children in household and their structural and emotional ties with the ex-patient.
Subjects: Minor children (under 21 years of age) in household where an ex-state mental patient resides. Sample of 600 former state patients released in 1956 are being located and interviewed 10 years after release.
Methods: Through interviews with approximately 600 former patients, data are collected regarding minor children residing in the ex-patient's household. Data will be analyzed in order to provide certain descriptions of the number and ages of children and their relationship to the former mental patient. A description of the family composition in relation to the former patient's family role position will be carried out as a basis for further work in the study of impact of psychotic persons upon children.
Findings: About 80 percent of married ex-patients have minor children living in their households. Patient-mothers are not as likely to be rehospitalized as are patient-fathers. Patient-mothers are not as likely to be rehospitalized as are patient non-mothers.
Duration: June 1964-June 1967.
Investigator(s): Dorothy Hillyer Miller, M.A., Research Specialist I, California Department of Mental Hygiene, Social Research Laboratory, 3330 Geary Blvd., San Francisco 18, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A paper is planned for submission to a professional sociological journal. Final reports to be available June 1967.

20-LJ-3 PREGNANCY AND PSYCHOSIS

Purpose: To examine influence of psychosis on process of pregnancy and subsequent early infant development, and influence of pregnancy on psychotic condition.
Subjects: Pregnant psychotic mothers hospitalized in a state hospital and infants born to them.
Methods: Interviews of psychotic mothers during pregnancy and after delivery, and intensive observation of infants during first weeks of life.
Duration: September 1964-September 1967.
Investigator(s): Bernard Rosenblatt, Ph.D., Chief Psychologist, Worcester Youth Guidance Center, 275 Belmont St., and David Moriarty, M.D., Clinical Director, Worcester State Hospital, Worcester, Mass. (Reported by Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center.)

Child rearing

20-MA-1 STRUCTURE OF MATERNAL ATTITUDES IN TWO CULTURES

Purpose: To determine differences in the factorial structure of maternal attitudes in Filipino and American mothers.
Subjects: 133 American and 134 Filipino mothers of elementary school children.
Methods: Administration of the Parental Attitude Research Instrument (PARI), 23 scales of five items each; separate analysis of data for each group; comparison of analyses for homogeneity of item content.
Findings: Filipino mothers show more concern with parental control and authority, while American mothers show concern for their children being on their own and responsible for their own behavior. This is consistent with data obtained by observation. Data suggest that much caution should be observed when using variables defined in one culture in the study of personality development in another culture. Although a pattern of behavior encompassed by given items may be homogeneous, the whole pattern may occur in a different context of motivation and therefore have quite different significance in one society than in another. The same set of items may not be measuring the same thing in each culture.
Investigator(s): George M. Guthrie, Ph.D., Professor of Psychology, Pennsylvania State University, University Park, Pa.
Publication: Paper read at annual meeting of the Japanese Psychological Association, Tokyo, July 1965; copy available from investigator.

20-MA-2 SOCIAL EFFECTS OF EDUCATION ON CHILDREN OF SUBURBAN BLUE COLLAR WORKERS

Purpose: To examine variation in attitudes toward education for one's children; to see how those attitudes may be affected by three sets of interpersonal relations: those centering in the extended family, those arising in the work place, and those developed through friendship patterns and voluntary participation in formal organizations.
Subjects: 500 white Protestant working class fathers of suburban public high school students.
Methods: Survey questionnaire with analysis primarily nonparametric unless true interval scales can be constructed. In that event, computer programs to analyze multivariate data are utilized; also, a computer program is used to construct interval scales.
Duration: June 1965-June 1966.
Investigator(s): Robert T. Stout, Doctoral Candidate in Educational Administration, University of Chicago, 5835 S. Kimbark, Chicago, Ill. 60637.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-MD-1 OBSERVATION AND ANALYSIS OF MOTHER-CHILD INTERACTIONS

Purpose: To apply new and refined observational methods to the study of interaction patterns between three-, four-, and five-year old children and their mothers; to demonstrate that the method can delineate characteristic styles of communication in individual subject-pairs, that it is equally effective with subjects of different ages, cultural backgrounds (advantaged

and disadvantaged), or with disturbed children of contrasting types of behavior disorder (withdrawal and nonparticipation vs. inappropriate impulsivity).
Subjects: 10 each three-, four-, and five-year old children drawn from a culturally advantaged population; 10 four-year olds from the Seattle Operation Headstart project; 20 boys, aged three, four, and five, drawn from the rosters of the University of Washington Child Psychiatry Clinic.
Methods: Recording of nonverbal behavior codings by highly trained observers simultaneously with recording verbal interchanges of subjects; analysis of material in terms of single empirically defined nonverbal acts, broad avenues of communication, and combination of verbal and nonverbal data on more abstract behavior dimensions; at each of these levels, assessment of systematic differences in the frequency, duration, and/or sequential ordering of patterns of events by means of contingency analysis techniques.
Duration: July 1965-1967.
Investigator(s): Kate L. Kogan, Ph.D., Clinical Associate Professor of Psychiatry, and Herbert C. Wimberger, M.D., Assistant Professor of Psychiatry and Director, Child Psychiatry Clinic, School of Medicine, University of Washington, Seattle, Wash. 98105.
Cooperating group(s): Boeing Good Neighbor Fund; National Institutes of Health, U. S. Department of Health, Education, and Welfare.
Publication: Reports to be prepared for professional psychiatric and psychological journals as different aspects are completed; copies of papers describing methodology, presented at professional meetings, are available from investigators on request.

20-MD-2 CHILD TRAINING AND CHILD CARE PRACTICES AS ANTECEDENTS TO LEVELS OF ADRENALINE AND NOR-ADRENALINE

Purpose: To explore genetic and experiential background to greatly differing, but apparently consistent, levels of adrenaline and noradrenaline found in urine of children; to explore relation of these levels to child behavior and personality.
Subjects: 50 boys, all those born in Solna (Stockholm suburb) in 1958, and their parents.
Methods: Fluorimetric bioassay of night urine for catecholamine rate per minute over one night of sample boy and his two parents. Data from longitudinal study over eight years on physical and mental development, and spanking and other disciplinary patterns used on each child. Some ratings on personality, as well as teachers' reports.
Duration: September 1965-December 1966.
Investigator(s): William W. Lambert, Ph.D., Professor, Department of Psychology, Cornell University, Ithaca, N. Y.; Marian Frankenhaeuser, Ph.D., Docent, Psychology Department, University of Stockholm; and Ingrid Klackenberg-Larsson, Director, Psychology Development, Solna Study, Karolinska Sjukhuset, Stockholm, Sweden.
Cooperating group(s): Solna Longitudinal Study; Swedish Institute for Social Research; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Preliminary results were to be reported at an international meeting on development research, June 23, 1966.

20-MG-1 PARENTS' DISCUSSION GROUP AT P.S. 289, BROOKLYN, N. Y., "TO LEARN THROUGH DISCUSSION HOW TO IMPROVE CHILDREN'S BEHAVIOR AND LEARNING AT HOME AND SCHOOL"

Purpose: To test hypothesis that, if parents or parent-person of children in kindergarten and first grade would attend a weekly discussion group for 15 weeks, there would be improvement in behavior and learning of children in school and in home.
Subjects: Parents and parent-persons of approximately 185 children in kindergarten and first grade in P.S. 289, whose children did not speak clearly, used bad language, were enuretic, had nervous habits, and exhibited anti-social behavior.
Methods: Parents were requested to respond on enclosed postcard if they would attend weekly discussions. Thirty-five responded, and 22 came, no parent more than seven times. Parents raised problems for discussion, while discussion leader gave insight or interpretation when requested. Parents, teachers, and social agencies reported effects on children and parents.
Duration: February-June 1965.
Investigator(s): Jeannette D. N. Fuchs, Ed.D., Assistant Professor of Education, Brooklyn College of the City University of New York, Brooklyn, N. Y. 11210.
Cooperating group(s): New York City Board of Education.
Publication: To be reported in Campus Schools News of New York City Board of Education.

SOCIAL, ECONOMIC, AND CULTURAL INFLUENCES

20-NA-1 ESKIMO IN A BAFFIN ISLAND TOWN

Purpose: To investigate the adjustment of Eskimo adults and children in a town where many only recently arrived.
Subjects: Individuals opportunistically selected for observation in a total population of about 900.
Methods: Observation and informal interviewing.
Investigator(s): John J. Honigmann, Ph.D., Professor of Anthropology, and Irma Honigmann, B.A., University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Northern Co-ordination and Research Centre of the Department of Northern Affairs and National Resources, Government of Canada.
Publication: Honigmann, John J. and Honigmann, Irma, Eskimo Townsmen, Ottawa: Canadian Research Centre for Anthropology, University of Ottawa, 1965; North 11:5:16-22, September-October 1965.

20-NA-2 CROSS-CULTURAL STUDY OF DEVELOPMENT OF CONCEPTS OF WOMEN'S ROLES--JAPANESE-AMERICAN GIRLS IN HAWAII AND NEW YORK CITY GIRLS

Purpose: To compare sex-role perceptions of girls in differing cultural milieus.
Subjects: Girls of Japanese ancestry in Hawaii, and girls from typically "majority" cultural backgrounds in New York City, eight and 11 years of age.
Methods: Structured interviews and responses to wide range of pictorial materials depicting various aspects of sex-role activity.
Duration: 1964-1965.
Investigator(s): Hazel V. Kraemer, Ph.D., Professor of Child Development and Family Study, University of Hawaii, Honolulu, Hawaii; and Ruth E. Hartley, Ph.D., Psychological Consultant, Consultation Services, 54 Morningside Dr., New York, N. Y.
Cooperating group(s): Faculty Research Fund, University of Hawaii; U. S. Department of Health, Education, and Welfare.
Publication: Several reports of results from the New York City sample have been published by Ruth E. Hartley; report of comparative data to be submitted to appropriate professional outlets.

20-NA-3 PREVENTION OF CULTURALLY DETERMINED RETARDATION

Purpose: To develop child rearing programs for day and residential care of children under three years of age from disadvantaged backgrounds; to develop a training program for child caretakers; to develop research programs which will evaluate effects of the various components in the child rearing programs and determine degree of success in preventing culturally determined retardation and distortion of personality development.
Subjects: 16 homeless infants in their first weeks of life from disadvantaged backgrounds; 16 infants from matched backgrounds reared in own

homes except for day care; and 32 infants from matched backgrounds reared entirely in own homes.
Duration: October 1964-September 1967.
Investigator(s): Reginald S. Lourie, M.D., Director, and Allen E. Marans, M.D., Research Associate, Department of Psychiatry, Children's Hospital of the District of Columbia, 2125 13th St., N. W., Washington, D. C.
Cooperating group(s): Queen Anna-Maria Institute for Child Health, Athens, Greece; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers will be published in appropriate publications and presented at appropriate conferences.

20-NA-4 A BABY'S FIRST THREE MONTHS: COMPARISON OF DUTCH AND AMERICAN FAMILIES

Purpose: To compare equivalent Dutch children with previously collected United States data on life in the first three months.
Subjects: 10 babies in Enschede, Holland of middle class intact families; U. S. babies were from Boston suburbs.
Methods: Three hours of systematic intermittent observations done in the home every two weeks in the first three months of life. Each baby is thus seen six times, for a total of 18 hours. Each observation period is recorded on a checksheet listing baby and mother behaviors, and environmental conditions--noise level, number of toys, people in room, etc.
Duration: January-December 1966.
Investigator(s): Freda Gould Rebelsky, Ph.D., Assistant Professor of Psychology, Boston University; on leave of absence as Senior Lecturer, University of Utrecht, Holland.
Publication: To be submitted to Child Development.

20-NA-5 THE ATTITUDES AND CONCERNS ABOUT MARRIAGE AND THE FAMILY OF NINTH-GRADE PUPILS FROM THE PUBLIC SCHOOLS OF GEORGIA

Purpose: To determine concerns of ninth-grade pupils with the important aspect of the life ahead for most of them--marriage and the family.
Subjects: 222 boys and 243 girls.
Methods: Use of an inventory involving questions and data to be given relative to their concerns.
Findings: Over 90 percent expressed a desire for more than one child in case of marriage; over 90 percent of boys listed housewife as the occupation they wanted their wives to follow; over 80 percent of boys and over 70 percent of girls stated they expected both parents to be equally concerned in rearing children.
Duration: September 1964-completed.
Investigator(s): Karl C. Garrison, Ph.D., Professor of Education, Old Dominion College, Norfolk, Va. 23508.
Cooperating group(s): Principals of schools in Georgia.
Publication: To be published in Adolescence, Vol. 1, No. 1, Libra Publishers, Inc.

20-NA-6 SECONDARY EDUCATION IN TRANSITIONAL SOCIETIES (IVORY COAST)

Purpose: To examine allocative functions of complex European-type secondary school system in African context, with interest centering on

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role of education in processes of social mobility and elite formation in new states.
Subjects: Over 2,000 students drawn for troisieme and baccalaureate classes within all types of post-primary school.
Methods: Examination of social and ethnic factors influencing selection for and recruitment into secondary school system; analysis of patterns of internal mobility within the system in terms of retardation and movement between high and low status institutions.
Duration: 1963-1965.
Investigator(s): Philip J. Foster, Ph.D., Associate Professor and Assistant Director, Comparative Education Center, University of Chicago; and Remi P. Clignet, Doctorat en Recherche (Paris), Assistant Professor of Sociology, Northwestern University, Chicago, Ill.
Cooperating group(s): Carnegie Foundation.
Publication: Major publication to appear in late 1966.

20-NA-7 CHINESE YOUTH AND FAMILY IN SOUTHEAST ASIA

Purpose: To describe forces that motivate, facilitate, and direct changes within Chinese youth population in Southeast Asia, with particular emphasis on family processes and change.
Methods: Data collected from high school population in Hong Kong, Taipei, Manila, and Singapore by employing different criteria for sampling in each city.
Duration: Not reported-June 1967.
Investigator(s): William T. Liu, Ph.D., Associate Professor of Sociology, University of Notre Dame, Notre Dame, Ind.
Cooperating group(s): Notre Dame University Faculty Research grant; Social Science Research Council.

20-NA-8 A COMPARATIVE STUDY OF ANOMIE IN THE KIBBUTZ

Purpose: To investigate state of anomie in the Kibbutz in relation to recent incidents of organized juvenile delinquency in two of Israel's senior agricultural collectives, and to study other forms of social and emotional deviance.
Subjects: Juvenile populations of 25 Kibbutzim, representing all political parties.
Methods: Use of objective and subjective indices to assess rate of anomie in each Kibbutz, including rates of suicide, crime and delinquency, and prostitution, as well as scaled measures of normlessness, powerlessness, anomia, and psychopathology. All variables are intercorrelated. Interviews are conducted with randomly chosen subsamples from various strata within each Kibbutz.
Duration: January 1965-January 1968.
Investigator(s): Salomon Rettig, Ph.D., Professor of Psychiatry, School of Medicine, Ohio State University, Columbus, Ohio 43210; and Shlomo Shoham, Senior Lecturer and Director, Institute of Criminology, Bar-Ilan University, Israel.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-NA-9 MOTIVATIONAL FACTORS INFLUENCING ACADEMIC ACHIEVEMENT OF ELEVENTH GRADE PUERTO RICAN HIGH SCHOOL STUDENTS

Purpose: To test certain assumptions about similarities and differences in academic motivation between the "now" oriented Insular and the "future" oriented Continental United States culture; to elaborate understanding in related areas of Puerto Rican motivation where prediction of expected outcomes cannot yet be made; to look within the Insular culture to determine homogeneity of components by study of three assumed subcultures; and to sharpen understanding, through use of interviews, by focusing on parental influences which hold promise of relating to academic motivation.
Subjects: Eleventh grade students in Puerto Rico.
Methods: Both item and scale validation are done on responses of separate samples of subjects. Criterion groups to illustrate high and low motivation are selected from a regression analysis definition of under- and over-achievement.
Duration: Not reported-August 1967.
Investigator(s): Edward W. Christensen, College of Education, University of Puerto Rico, Rio Piedras, P. R.; and William W. Farquhar, Ph.D., Department of Education, Michigan State University, East Lansing, Mich.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education August 1967.

20-NA-10 SOCIAL MOBILITY AND THE ENGLISH LANGUAGE IN PUERTO RICO: INFLUENCES ON MOTIVATION AND OUTLOOK OF NINTH GRADE PUPILS

Purpose: To identify relative importance of pupils' social background, type of school, academic competence, vocational aspirations, and type of community of residence upon interest in or disinterest for study of English in a Spanish-speaking part of United States society.
Subjects: Pupils in both public and private schools, from classrooms selected for representativeness as to type of school, character of locale, section of country, etc.
Methods: Collection of both objective data and attitudes regarding academic careers and role of two languages in personal, public, and occupational life.
Duration: Not reported-March 1966.
Investigator(s): Erwin H. Epstein (Doctoral Candidate, University of Chicago), Department of Educational Policy Studies, University of Wisconsin, Madison, Wis. 53706; and C. Arnold Anderson, Ph.D., Professor, Department of Education, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-NA-11 COMPARISON OF AMERICAN AND NORWEGIAN NURSERY SCHOOL CHILDREN ON INDEPENDENCE BEHAVIOR AND TRAINING

Purpose: To compare Norwegian and American nursery school children for amount of dependency they exhibit in a task-situation with a stranger (investigator) and in a task-situation with their mothers; to compare amount of independence-training by mothers of two national groups; and to relate individual differences in child's dependency to differences in independence-training.
Subjects: American and Norwegian nursery school children, ages four and a half to five, 12 to 20 children in each group.

Methods: Investigator sets up a task-situation for subject; instruments chosen are toys and games (puzzles and blocks) suitable for subject's age, and on an increasing scale of difficulty. Amount of child's help-seeking is recorded, with tape recorder and on recording sheets, in situation with mother and with stranger (investigator).
Duration: Not reported-1966.
Investigator(s): Else Wern Hjertholm, Graduate Student, and Lawrence Kohlberg, Ph.D., Department of Psychology, Committee on Human Development, University of Chicago, Chicago 37, Ill.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-NA-12 INFLUENCES OF CULTURAL PATTERNS ON THE THINKING OF CHILDREN IN CERTAIN ETHNIC GROUPS

Purpose: To determine effect of differing cultural ideals, values, and patterns upon cognitive style of children, specifically with regard to field-dependence, as defined by Herman Witkin and associates; to validate a new verbal measure of field-dependence, the Verbal Disembedding Test.
Subjects: 100 10-year old boys: 50 highly traditional Jewish, 30 white Anglo-Saxon Protestant, compared with Herman Witkin's normative population of 56 partially acculturated Jewish boys.
Methods: The following tests are administered: Body Adjustment Test, Wechsler Intelligence Scale for Children, Embedded Figures Test, Figure Drawing Test (Hanna Marlens' Sophistication of Body Concept), and Verbal Disembedding Test.
Findings: Jewish children were found to be more field-dependent than the Protestant children on Body Adjustment, Block Design, Object Assembly, and Figure Drawing tests.
Duration: June 1965-July 1966.
Investigator(s): Zachary Dershowitz, Ph.D., Assistant Professor of Education, Long Island University, Brooklyn Center, 1637 54th St., Brooklyn 9, N. Y.
Cooperating group(s): Downstate Medical Center; National Foundation for Jewish Culture; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Division of Elementary-Secondary Research, Office of Education; Mimeographed copies of doctoral dissertation available through Long Island University; New York University Library; University Microfilms.

20-NA-13 A STUDY OF METHODS OF PREPARATION OF INFANT FORMULAS: A MEDICAL AND SOCIO-CULTURAL APPRAISAL

Purpose: To determine the efficiency with which recommended procedures for home preparation of infant formulas are followed, and whether and how socio-economic or socio-cultural factors modify advice given by health personnel; to determine whether simplified techniques may be substituted for present procedures in urban areas with approved water supply.
Subjects: High-risk mothers and their infants now receiving care under the Maternal and Infant Care program of the Department of Obstetrics of Temple University School of Medicine delivered at Temple University Hospital; also, a non-MIC group of ward, semi-private, and private patients delivered at the same hospital.
Methods: Socio-economic status will be determined from Census tract data or conventional indices such as occupation, education, etc. Interviews will be conducted with new mothers prior to discharge from hospital and

instructions given regarding preparation of formula. Home visits will be made several weeks later to determine methods used and if, how, and why they differ from recommended procedures; cultures will be made of formula, containers, and utensils used. Standard statistical methods will be used to test confidence limits of interpretation of data.
Duration: June 1966-May 1967.
Investigator(s): Norman Kendall, M.D., Associate Professor of Pediatrics; Victor C. Vaughan, III, M.D., Professor of Pediatrics; William P. Barba, II, M.D., Associate Professor of Pediatrics; and Earle H. Spaulding, Ph.D., Professor of Microbiology, Temple University School of Medicine, 3400 N. Broad St., Philadelphia, Pa. 19140.
Cooperating group(s): Temple University Hospital; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-ND-1 THE SOCIAL PSYCHOLOGICAL CORRELATES OF OCCUPATION

Purpose: To ascertain the social psychological correlates, including parental values and child-rearing practices, of a number of dimensions of occupational experience.
Subjects: 3,000 men, a representative sample of all men employed in civilian occupations in the U.S.
Methods: Structured interviews.
Duration: 1962-indefinite.
Investigator(s): Melvin L. Kohn, Ph.D.; Carmi Schooler, Ph.D.; and Morris Rosenberg, Ph.D., Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.
Cooperating group(s): National Opinion Research Center, University of Chicago.
Publication: To be published in appropriate professional journals.

20-ND-2 A STUDY OF THE RELATIONSHIPS BETWEEN THE EDUCATIONAL PLANS OF "AVERAGE" HIGH SCHOOL SENIORS AND SOME OF THE SOCIAL CONDITIONS IN THEIR LIVES

Purpose: To distinguish between those students of "average" ability who plan to continue their education and those who do not.
Subjects: High school seniors from the class of 1960 in the State of Rhode Island, 876 girls and 417 boys.
Methods: Administration of the Your Educational Plans Inventory, an untimed paper and pencil series of questions concerning social conditions; identification of subjects planning to continue or not to continue education after high school; examination of responses to YEP inventory to determine if it can distinguish between those intending to continue education and those intending not to do so.
Findings: Indication of an association between post-high school educational intentions and certain conditions in the social milieu of the subjects.
Duration: June 1960-August 1965.
Investigator(s): Herbert S. Parker, Ed.D., Vice President, U.S. Industries, Inc., Educational Science Division, 12345 New Columbia Pike, Silver Spring, Md. 20910.
Cooperating group(s): Bureau of Research, Rhode Island State Department of Education.
Publication: Thesis is available through the offices of the American Personnel and Guidance Association; Teachers College, Columbia University; and the author.

20-ND-3 ADOLESCENT CAREER PLANS AND THE IMPACT OF CHRONIC ECONOMIC DISTRESS UPON ADOLESCENT EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS

Purpose: To increase proportion of adolescent career plan variation accounted for by specific variables; to assess impact of chronic economic distress upon career plans of adolescents; and to assemble data for a longitudinal analysis of career plan change and constancy in both economically prosperous and distressed areas.
Subjects: 6,500 adolescents who were enrolled as high school sophomores in 1963 in all public and parochial secondary schools in six Pennsylvania third class cities, three economically depressed, three prosperous.
Methods: Collection of data on following independent variables: parental socio-economic status level; socio-economic level of subjects' schools and peer groups; career plan levels set for subjects by parents; career plan levels of peer groups; degree to which education of subjects' mothers is markedly higher than that of fathers; intensity of parental pressure on subjects to continue education beyond high school; size of subjects' families; and subjects' birth order.
Investigator(s): Richard A. Rehberg, Center for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oreg. 97403; and David L. Westby, Ph.D., Assistant Professor, Department of Sociology-Research, Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report available from investigator; paper presented to Eastern Sociological Society, April 1966.

20-ND-4 YOUTH UNEMPLOYMENT: FRICTIONS IN THE THRESHOLD OF THE WORK CAREER - AN EXPLORATORY PROBE

Purpose: To determine relationship of attitudes, needs, expectations, beliefs, and perceptions of unemployed youth as they relate to desirable and undesirable work experience and socio-economic characteristics associated with those subjective attitudes.
Subjects: Three samples of 100 individuals each, drawn from public high schools and consisting of recent high school graduates, high school students identified by their school counselors as potential dropouts, and persons who actually drop out.
Methods: Youth in sample are followed for one year after first contact, and work experience of each is studied, including such factors as job-finding time if employed, pay rate, number of jobs held, time employed, and job satisfaction. Factors believed to be cause of employment experience of each youth are obtained by testing, questionnaires, and interviews. Factors consist of level of education, attitudes, needs, expectations, beliefs and perceptions, job-seeking behavior, work history prior to data collection period, aptitudes, and demographic variables such as race, parental occupation, and parental education. Subjective attitudes and job experience of sample groups are analyzed to determine actual extent and importance of above factors in determining success or lack of success at employment.
Duration: 1965-1967.
Investigator(s): Rene V. Dawis, Ph.D., Industrial Relations Center, University of Minnesota, Minneapolis, Minn. 55455.
Cooperating group(s): Office of Manpower, Automation, and Training, U. S. Department of Labor.

20-NG-1 THE SOCIALIZATION OF ADOLESCENT POLITICIANS

Purpose: To determine factors in homes, schools, and peer groups of children which contribute to differential civic involvement, i.e., leadership of voluntary associations, membership in political organizations, activity in high school political campaigns, and to explore this sort of activity with political participation later in life.
Subjects: National sample of 1,669 high school seniors (class of 1965) in 97 high schools, chosen on a probability basis.
Methods: Interviews with subjects and at least one parent, with principals of selected schools, and with social studies teachers.
Duration: June 1965-August 1966.
Investigator(s): David R. Segal, Ph.D. Candidate, Social Psychology Laboratory, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Survey Research Center, University of Michigan; American Heritage Foundation.
Publication: Will probably appear as a series of articles starting in 1967.

20-NM-1 TRENDS AND VARIATIONS IN FERTILITY IN THE UNITED STATES

Purpose: To describe trends and differentials in fertility in the United States.
Subjects: Use of Census data in children ever born in relation to certain characteristics--medical and biological characteristics of births, fecundity and family planning, differential fertility by nativity, color, residence, migration, marital characteristics, education, occupation, and other indices of socio-economic status.
Findings: Some reduction in differentials except those by color and religion.
Duration: 1960-1966.
Investigator(s): Clyde V. Kiser, Ph.D., Senior Member, Technical Staff, Milbank Memorial Fund, New York, N. Y. 10005; Wilson H. Grabill, Chief, Family and Fertility Statistics, Bureau of the Census; and Arthur A. Campbell, M.A., Chief, Natality Branch, Division of Vital Statistics, National Center for Health Statistics, U. S. Department of Health, Education, and Welfare, Washington, D. C.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: The entire series is scheduled for publication by the Harvard University Press.

20-NM-2 YOUNG CHILDREN AND THE WATTS REVOLT: REACTIONS OF NEGRO, MEXICAN-AMERICAN, AND WHITE PRESCHOOL CHILDREN TO THE 1965 LOS ANGELES RACE RIOTS

Purpose: To assess differential awareness and impact on Negro, Mexican-American, and white children of the five days of violence, destruction, and disorganization in Los Angeles. Specifically investigated were extent and accuracy of awareness of riot events; experiences of fear; and favorable and unfavorable attitudes toward participants and antagonists in the rioting.
Subjects: 107 Negro preschool children of both sexes and 23 Mexican-American preschoolers, all living in or near the riot area; and 52 white children from private kindergartens outside riot area. All subjects were four or five years of age.
Methods: Individual, semi-structured interviews, conducted and recorded

verbatim by experienced Negro, white, and Spanish-speaking interviewers. All subjects were interviewed within two day period immediately after end of rioting and lifting of curfew. Protocols were independently judged with high agreement by two raters for awareness of riot and its events; fears expressed or clearly implied; and attitudes toward riot participants, including punishments recommended.

Findings: Aware of riot: 92 percent Negro, 78 percent Mexican-American, 71 percent white, with most vivid reports given by riot-area subjects. With the riot-aware subjects, the most frequently mentioned events were the fires: 70 percent Negro, 89 percent Mexican-American, 61 percent white. Fear: Approximately 50 percent in each group indicated some experience of fear during the time. Attitudes: In all groups, high proportion advocated punishment or retaliation toward Negro rioters. Small numbers of Negro subjects showed only sympathy toward rioters or only fear/hostility. Most Negro subjects combined punitive response with indications of sympathy or identification with the rioters and appeared in some conflict or ambivalence. Mexican-American subjects were quite reticent, but feelings expressed were almost uniformly hostile-fearful toward Negro rioters and Negroes in general. White subjects showed a variety of attitudes, including fear and punitiveness. About one-fourth indicated some awareness of Negro rioter motivation (poverty, discrimination) or of individual differences (some good, some bad) projectively identified with the rioters.

Duration: August 1965-completed.

Investigator(s): Ralph L. Dunlap, Ph.D., Chief Psychologist; Astrid Beigel, A.B., Research Scientist; and Virginia Armon, Ph.D., Supervisor, Clinical Psychology Training, Southern California Permanente Medical Group, 4900 Sunset Blvd., Los Angeles, Calif. 90027.

Cooperating group(s): Los Angeles County Superintendent of Schools--Project Head Start; Bellview Community Church Nursery School; University of Southern California Youth Studies Center--Crenshaw Community Project; Los Angeles Suicide Prevention Center.

Publication: Submitted for publication; copies of report available on request from Dr. Dunlap.

20-NM-3 ATTITUDES TOWARD CIVIL LIBERTIES AMONG HIGH SCHOOL SENIORS

Purpose: To explore relationship between attitudes toward civil liberties and beliefs about nonconformity among high school seniors.

Subjects: All seniors enrolled in the several public, private, and parochial high schools in Portland, Oregon, and its environs.

Methods: A self-administered survey questionnaire is distributed to all seniors. Besides eliciting responses to issues of constitutional law, questionnaire includes (1) measures of social and political anomie and alienation, (2) semantic differential procedures to develop a meaning profile regarding deviant causes and people, and (3) questions concerning social background characteristics of this population of respondents.

Duration: June 1965-November 1966.

Investigator(s): John C. Pock, Ph.D., Associate Professor of Sociology, Reed College, Portland, Oreg. 97202.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-NM-4 EFFECTS OF CLASS AND RACIAL BIAS ON TEACHER-EVALUATION OF PUPILS

Purpose: To test hypothesis that, given otherwise identical descriptions of pupils, teachers will tend to rate social and personal adjustment of lower class and Negro students as poorer than that of middle class or white students.

Subjects: Elementary school teachers in New York City.

Methods: Teachers will be given identical vignettes describing behavior of a nine-year old child. For half of the teachers, child will be white, for other half, Negro. Within each condition, for half the teachers, child will be middle class, and for other half, child is lower class. As a control, half of the descriptions will be those of boys, and half will be those of girls. In addition, half of the children are to be "orderly, interested in classwork, and otherwise normal." The other half are to be "unruly, disinterested, and otherwise disruptive." Personality and background material of teachers will be obtained and utilized in analysis of findings.

Duration: June 1965-June 1966.

Investigator(s): George S. Rotter, Assistant Professor, and Naomi Gotkis, Research Assistant, Department of Psychology, Long Island University, Brooklyn, N. Y. 11201.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

EDUCATIONAL FACTORS AND SERVICES

General

20-OD-1 EFFECTS OF SELECTED FILM AND COUNSELING EXPERIENCES ON ATTITUDES TOWARD COLLEGE

Purpose: To determine effects of educational counseling and an experimental film on attitudes toward college of capable high school senior girls who indicate low probability of attending college.
Subjects: 191 capable high school senior girls indicating low probability of attending college.
Methods: Various combinations of one counseling interview and showing of a film designed to change attitudes toward college. Criterion measures used are The College Questionnaire and applications for college admissions during four-month period following treatment phase.
Findings: Girls indicating low finances as chief obstacle to college attendance held significantly more favorable scale-measured attitudes toward college than did those selecting motivational factors as primary deterrent to college. Low-finance group subsequently applied for college admission in significantly greater numbers than did low-motivation group. Among low-motivation subjects only, students who saw film and were also individually counseled scored significantly higher on attitude-scale measure than did students who were group counseled. Evidence suggests that counseling may influence some low-finance subjects to apply for college admission.
Investigator(s): Howard J. Sullivan, Ph.D., Assistant Professor of Education, Arizona State University, Tempe, Ariz.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: *Journal of Counseling Psychology* 13:1, 1966.

20-OL-1 STUDY OF CONTROLLED TRIALS OF VARIOUS PUNISHMENTS IN A SCHOOL POPULATION

Purpose: To determine the effect of various punishments on subsequent conduct of school boys.
Subjects: 150 boys, ages 12 to 16.
Methods: Boys were subjected to randomized, controlled applications of school discipline, such as reprimand or detention. Punishments were given for common school misdemeanors including lateness, smoking, and failure to do work assigned.
Findings: No significant differences were detected between the effects of reprimand and detention. It is expected that information gathered from this study of punishment in a "trivial" context will facilitate the establishment of experimental research on the effect of various types of punishment in penal institutions and magistrates' courts.
Duration: 1964-1966.
Investigator(s): J. W. Palmer, Department of Clinical Epidemiology and Social Medicine, St. Thomas' Hospital Medical School, London, S.E. 1, England. (Reported in the section "Current Projects" of the *International*

Bibliography on Crime and Delinquency, June 1966.)
Cooperating group(s): Epidemiological Research Unit, Medical Research Council, South Wales.

Achievement, aptitude, and school adjustment

20-OM-1 IMPROVING ACADEMIC ACHIEVEMENT THROUGH STUDENTS' SELF-CONCEPT ENHANCEMENT

Purpose: To attempt, in three experiments, to modify students' self-concept of ability in school; to determine whether such changes in self-concept are related to improved achievement; and to study, longitudinally, the relationship between self-concept, expectations of significant others, and achievement. Continuation study to determine long-range effect of experimental treatments.
Subjects: Random samples of low-achieving ninth grade students, and 800 students followed from 7th through 12th grade.
Methods: Three experimental designs with control and placebo groups: before-and-after treatment, questionnaire and achievement information gathered. Yearly questionnaire and school data gathered on longitudinal group. Statistical analysis uses correlation, analysis of variance, and Chi-square. Delayed effect of experimental treatments is tested by analysis of continued change in intervening and dependent variables and tests of difference between experimental and comparable non-experimental groups.
Findings: Though two experiments did not succeed, one, involving the parents of low-achieving ninth grade students in a special program, did have an effect on the child's self-concept of ability, which was reflected in the grade point average of the group at the end of one year. Changes in self-concept are reflected in changes in achievement. Also self-concept of ability is derived from significant others, a limiting factor in achievement, and intervenes between evaluations of others and performance.
Duration: 1963-August 1966.
Investigator(s): Wilbur B. Brookover, Ph.D., Director, Social Science Teaching Institute; Edsel L. Erickson, Ed.D., Professor of Teacher Education and Sociology, Western Michigan University, Kalamazoo; Jean M. LePere, Ph.D., and Don E. Hamachek, Ph.D., Michigan State University, Lansing Mich.; Shailer Thomas, Ph.D., Assistant Professor of Sociology, Ohio State University, 1775 S. College Rd., Columbus, Ohio 43210.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: A monograph of full study and articles on selected aspects of the findings; Improvement of Academic Achievement Through Students' Self-Concept Enhancement, III, Bureau of Educational Research Services, Michigan State University, was to have been published in September 1966.

20-OM-2 PROJECT TALENT ONE-YEAR FOLLOW-UP STUDIES

Purpose: To determine post-high school activities of young people originally tested in 1960 when they were in high school; to relate this information to data collected from these same young people in 1960. These relationships aid in the preparation of a comprehensive counseling guide indicating patterns of aptitudes and abilities which are predictive of success in various work and educational experiences.
Subjects: A probability sample of entire high school population in spring

of 1960. Report is based on the young people from this sample who responded to the mailed questionnaire and approximately five percent of nonrespondents who were contacted through field surveys.
Methods: After data collected from mailed questionnaires and nonrespondent questionnaires had been coded, punched onto cards, and transferred to magnetic tapes, methods of multivariate analysis were generally used to relate data collected in 1960 to follow-up data.
Findings: Results of this study have provided evidence of the predictive validity of the TALENT variables for membership in various post-high school occupational, educational, and career-plan groups.
Duration: May 1963-August 1965.
Investigator(s): John C. Flanagan, Ph.D., and William W. Cooley, Ed.D., Project TALENT, 135 N. Bellefield Ave., Pittsburgh, Pa. 15213.
Cooperating group(s): University of Pittsburgh; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Project TALENT One-Year Follow-Up Studies to be available in June 1966 from Project TALENT.

20-OM-3 GROUP PROCEDURES FOR ASSISTING MALADAPTED CHILDREN, GRADES FIVE TO SEVEN

Purpose: To assist maladapted children to develop better relationships to classroom work, and improve achievement and adjustment.
Subjects: Currently, all the fifth, sixth, and seventh grade children in the Laboratory School of the University of Chicago. Eventually, all the children in the same grades in a "culturally disadvantaged" school.
Methods: Assessment battery to select normals, controls, and maladapted subjects; division of maladapteds into four-man groups, on basis of grouping principles developed in this Laboratory over the years; assignment of tasks to these leaderless four-man groups; recording; analysis of recording to see how to change the task for the next session; re-assessment at end of year to evaluate treatment.
Duration: February 1965-January 1970.
Investigator(s): Herbert A. Thelen, Ph.D., Professor of Educational Psychology, University of Chicago, 5835 S. Kimbark Ave., Chicago, Ill. 60637.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles in process; book or monograph planned.

20-OM-4 IMPULSE CONTROL AND ANXIETY RELATED TO SCHOOL ADJUSTMENT AND ACADEMIC ACHIEVEMENT AMONG HIGH SCHOOL MALES

Purpose: To determine the value of psychometric measures of impulsiveness and anxiety for predicting potential disciplinary problems, including dropouts, among high school males.
Subjects: Sophomore male high school students.
Methods: Predictor tests, including intelligence tests, study habit inventories, need for achievement questionnaires, and standardized and experimental personality inventories; criterion measures, including teacher ratings, disciplinary problems (school and community), and grades.
Duration: January-December 1966.
Investigator(s): Ernest S. Barratt, Ph.D., Research Professor, Department of Neurology and Psychiatry, Medical Branch, University of Texas, Galveston, Tex. 77551.
Cooperating group(s): Galveston schools; Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-5 A PRELIMINARY EVALUATION OF NURSERY SCHOOL EXPERIENCE ON THE LATER SCHOOL ADJUSTMENT OF CULTURALLY DISADVANTAGED CHILDREN

Purpose: To provide pilot data on relationship between preschool experience and early school adjustment of culturally disadvantaged children.
Subjects: 42 first, 43 second, and 32 third grade, low socio-economic status children, some of whom had attended a day care nursery, the public school's kindergarten, or had no preschooling.
Methods: Evaluations were made in two-way analysis of variance designs (grade level x preschool experience) for intelligence (CTMM, Short Form), reading and arithmetic achievement (CAT), report card grades, teacher ratings of personal-social adjustment, as well as other measures. A number of background variables were also studied.
Findings: Data indicated that children with preschooling were doing better in school than children with no preschooling, especially in reading and arithmetic achievement. There were no statistically significant differences between them on measures used. Sex, within-group socio-economic level, and size of family were related to school performance.
Duration: September 1965-March 1966.
Investigator(s): Kenneth M. Goldstein, Ph.D., Research Psychologist, and Sherwood B. Chorost, Ph.D., Director of Psychological Services and Psychology Training Program, Wakoff Research Center, Staten Island Mental Health Society, 657 Castleton Ave., Staten Island, N. Y. 10301.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: In *Proceedings of the 74th Annual Convention of the American Psychological Association, 1966*. Washington, D. C.: American Psychological Association, 1966. In press.

20-OM-6 EFFECT OF TRIMESTER SCHOOL OPERATION ON THE ACHIEVEMENT AND ADJUSTMENT OF KINDERGARTEN AND FIRST THROUGH THIRD GRADE CHILDREN

Purpose: To compare achievement and adjustment of young children who attend school for regular school year with those who attend the same school an extra 35 days each year.
Subjects: Approximately 100 kindergarten and first through third grade children in school attendance in regular program an extra 35 days each year; and a matched group of children who attend only regular school year.
Methods: A three-year before-and-after design is used. Hammond-Skipper Preschool Achievement Rating Schedule, California Test of Achievement, and Developmental Reading Tests are used to measure achievement; Haggerty-Olson-Wickman Behavior Schedules and California Test of Personality to measure adjustment; and California Test of Mental Maturity to measure intelligence. Intelligence is controlled by a covariance technique and an analysis of covariance design employed to test significance of various relationships.
Duration: July 1963-December 1967.
Investigator(s): Ralph L. Witherspoon, Ph.D., Professor and Director, Institute of Human Development, Florida State University, Tallahassee, Fla. 32306.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-7 IDENTIFICATION AND DEFINITION OF SUBJECT-MATTER CONTENT VARIABLES RELATED TO HUMAN APTITUDES

Purpose: To define form-of-content variable and to measure form-of-content characteristics of instructional material; to manipulate form-of-content in especially prepared, parallel, instructional materials and to study the relationship of ability patterns to achievement on these materials.
Methods: Analysis and definition of form-of-content variable is based upon a priori conceptions, consultation, and analysis of selected textual materials. Subject matter specialists in science and mathematics education, research specialists, and educational psychologists assist in analyses of existing materials and in preparation of experimental materials. High school students whose cognitive aptitude patterns have been assessed are subjects for testing of effect on achievement of congruence of ability patterns and form-of-content.
Duration: Not reported-January 1967.
Investigator(s): Russel P. Kropp, Ed.D., Professor of Educational Research and Testing and Director, Institute of Human Learning; and Willard H. Nelson, Ph.D., Associate Professor of Psychology and Education, Florida State University, Tallahassee, Fla. 32306.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-8 THE SCHOOLING CAREERS OF MILITARY DEPENDENTS: A SOCIOCULTURAL STUDY

Purpose: To compare military dependents and local pupils with regard to their academic achievement, modes of participation, friendship patterns, and attitudes towards self and school.
Subjects: 900 children in 30 sixth grade classes, 15 classes where military dependents constitute entire classroom enrollment, a majority, or a minority; and 15 where local pupils are similarly distributed.
Methods: Classroom observation; sociometric, self-attitude, and standardized achievement testing, open-ended interviews with a stratified random sample of 200 local and migrant pupils, and with their teachers, counselors, principals, and parents, both at beginning and end of school year.
Duration: July 1964-July 1967.
Investigator(s): Herold C. Hunt, Ed.D., Eliot Professor of Education, Graduate School of Education; Bud B. Khleif, Ph.D., Research Associate; and Vincent F. Conroy, Executive Director, Center for Field Studies, Harvard University, Cambridge, Mass. 02138.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-9 EFFECTS OF GEOGRAPHIC MOBILITY ON PERFORMANCE IN HIGH SCHOOL

Purpose: To determine relationships between gross mobility and rank in class, scholastic achievement test scores, and participation in extracurricular activities; to study relationships between patterns of mobility.
Subjects: 2,000 pupils drawn from a pool of 3,000 senior boys and girls, requirements for inclusion being father or stepfather living at home, and enrollment in present school since beginning of 11th grade.
Methods: Sources of data are standardized intelligence and achievement test scores, school yearbooks, pupil questionnaire on education and occupation of father, and places of previous family residence, a scale of residence property values for the district, and a scale for rating extracurricular activities in terms of demands on time, effort, and ability.

Boys and girls are treated separately in all comparisons.
Duration: January 1965-June 1966.
Investigator(s): Harry R. Moore, Ed.D., Professor of Education, University of Denver, Denver, Colo. 80210.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-10 TO BETTER IDENTIFY AND UNDERSTAND HIGH SCHOOL FAILURES

Purpose: To better predict and understand the nature of high school failure by using a specific configural predictive model which combines sociological and psychological information in different ways; to discover sociological variables on the basis of which high school boys may be separated into subsamples differing with respect to the relative weight that different psychological characteristics have in relation to failure; and to construct predictor and "moderator" scales from items of a questionnaire and to develop empirically a configural prediction of failure.
Methods: Questionnaire used to obtain information.
Duration: June-December 1964.
Investigator(s): Kenneth Polk, Ph.D., Research Director, Lane County Youth Project, and Assistant Professor of Sociology, and G. Rolfe LaForge, Ph.D., Research Associate, Department of Psychology, University of Oregon, Eugene, Oreg. 97403.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OM-11 AN EDUCATIONAL ACHIEVEMENT PROFILE OF CHILDREN GRADES ONE TO SIX: INTERRELATIONSHIPS OF COGNITIVE, SOCIO-PERSONAL, AND PSYCHOMOTOR FACTORS

Purpose: To determine whether there is evidence of interrelationships among cognitive, socio-personal, and psychomotor factors in elementary school children, and if so, to deduct implications for curriculum planning and development.
Subjects: 1,500 boys and girls, grades one to six in the Pontiac, Michigan Public Schools.
Methods: Experimental-Control, based on economic level and school population. Test battery of academic, social, anthropometric and motor performance given at beginning and end of school year.
Findings: Relationships exist within specific areas (e.g., anthropometric) and between areas (e.g., academic and anthropometric). Some common interrelationships were noted in most age groups. Academic achievement measures were most closely related to other measures in the order of bone measurements, emotional stability, and motor performance measures. Clusters were identified.
Duration: September 1963-May 1964.
Investigator(s): Jean M. Young, Ph.D., Coordinator, Research and Evaluation, Pontiac Public Schools, 350 Wide Track Dr., East, Pontiac, Mich.
Cooperating group(s): Human Energy Research Laboratory, Michigan State University.
Publication: Ph.D. Thesis, College of Education, Michigan State University, June 1965.

20-OP-1 PREKINDERGARTEN SCREENING IN SCHOOL ATTENDANCE AREAS WITH HIGH CONCENTRATIONS OF CHILDREN FROM LOW INCOME FAMILIES

Purpose: To provide systematic approach to introducing children to their initial school experience; and to assess the readiness level of children scheduled to enter kindergarten in fall of 1966.
Subjects: Preschool children largely from low income families.
Methods: Home Interviews: Child's home is visited by a trained social worker and an interview schedule completed focusing on readiness level of child. Summer Preschool Activity: Children are invited to participate in a summer activity which, while being school-like in nature, is designed to allow teachers to observe behavior of children in a variety of situations. Profile Completion: A record of the Home Interview and the Summer Activity Observations are combined into a profile of each child.
Duration: March-August 1966.
Investigator(s): Marcus C. Betwee, M.A., Director, Special Services, and Thomas R. Sparrow, M.A., Coordinator, Special Government Programs, Wyandotte Public Schools, 639 Oak St., Wyandotte, Mich. 48192.
Cooperating group(s): Merrill-Palmer Institute of Human Development and Family Life.

20-OP-2 PRESCHOOL EXPERIENCE OF KINDERGARTEN CHILDREN AND LANGUAGE FACILITY

Purpose: To test relationship between quality and quantity of preschool experiential background and oral language facility; to discover possible relationships between sex, intelligence, and print environment, and the oral language of kindergarten children.
Subjects: 49 kindergarten children from three elementary schools selected at random in southwest, suburban Los Angeles County, California.
Methods: The sample, equated on seven variables, was administered the Peabody Picture Vocabulary Test and the Pre-School Experience Inventory (developed by the investigator). Through personal interviews, language samples were taped, transcribed, and evaluated using criteria developed by Loban, Strickland, and others. Sample was divided into a "rich" preschool experience group and a "poor" preschool experience group. Results of the four measures were dichotomized, and data were processed using Chi-square test of significance.
Findings: No significant relationships were evident between preschool experience, sex, or print environment and oral language facility in the population studied, but the above-the-mean intelligence subjects exhibited greater oral language facility, significant at the .05 level.
Duration: February-July 1966.
Investigator(s): Roderick McDaniel, Ed.D., Curriculum Consultant and Educational Materials Administrator, Torrance Unified School District, 2335 Plaza Del Amo, Torrance, Calif. 90501.
Cooperating group(s): University of Southern California, Los Angeles.
Publication: Dissertation available from University Microfilms, Ann Arbor, Michigan; Abstract in Dissertation Abstracts.

20-OS-1 THE RELATIONSHIP OF SEX GROUPING TO CLASSROOM PERFORMANCE

Purpose: To compare the effects of alternate coeducational and noncoeducational grouping on classroom performance of fourth grade Negro ghetto pupils over a period of one semester; to secure empirical data relevant to hypotheses identification as a step toward developing a sophisticated research design.

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Subjects: 22 boys and 30 girls ages 8 to 12, with nine- and 10-year olds composing 88 percent of the sample.
Methods: During the four months, the two classes were alternately grouped by sex. The Haggerty-Olson-Wickman Behavior Rating Schedule B was used twice a month during first and fourth weeks. Teachers rated the children on Schedule B which consisted of a graphic rating scale for each of 35 intellectual, physical, social, and emotional traits. Below the scale for each trait appear five descriptive phrases to assist the rater in making a quantitative judgment. Statistical analysis was made in terms of comparing the mixed to the separated groups. Significance of the difference of the means of two correlated groups formulae was used.
Findings: The t test seemed to indicate that the girls did better in a separated group in the subtests of physical and social. This seemed especially true during the first three months of the experiment. Intellectual and emotional traits as a whole did not seem to be affected. Boys seemed to do better in a separated group in the physical subtest, especially in the first three months of the experiment. Boys seemed to do better socially in mixed groups during the first three months of the experiment but better in the last month of the test in a separated group. Once again, intellectual and emotional traits as a whole were not affected. The F test, however, indicated that the test as a whole was not significant.
Duration: January-June 1965.
Investigator(s): Joseph Caliguri, Ph.D., Special Coordinator, Equal Educational Opportunities In-Service Program, Clark County School District, P.O. Box 551, Las Vegas, Nev. 89101.
Publication: Project will be written in article form for publication in suitable journal.

20-OS-2 SCHOLASTIC CONSEQUENCES OF PARTICIPATION IN HIGH SCHOOL SPORTS

Purpose: To ascertain extent to which athletic participation facilitates or impedes scholastic attainment among high school boys.
Subjects: All boys who enrolled in two midwestern high schools as tenth graders in the fall of 1961.
Methods: Matched sample of athletes and non-athletes (matched on social class, I.Q., curriculum location, ninth grade course marks) are compared as to their change in grade point average between ninth and later grades.
Duration: November 1965-summer 1966.
Investigator(s): Walter E. Schafer, Ph.D., and J. Michael Armer, Ph.D., Assistant Professors of Sociology, University of Oregon, Eugene, Oreg.
Cooperating group(s): Office of Scientific and Scholarly Research of the Graduate School of the University of Oregon.
Publication: Possibly in an educational journal.

20-OS-3 RELATIONSHIP OF EMOTIONAL INDICATORS ON HUMAN FIGURE DRAWINGS AND LEARNING PROBLEMS IN CHILDREN AGED FIVE TO 10

Purpose: To determine whether any specific emotional indicators on HFD's are related to learning problems and can be used as predictors for school achievement in the primary grades.
Subjects: 180 good pupils and 133 poor pupils, ages five to 10, attending regular classes Kindergarten through fourth grade, and 78 special class pupils who had learning difficulties and emotional problems despite normal I.Q.
Methods: Human Figure Drawing test was administered at beginning of

school year to all pupils in 23 classes and in special classes. At end of year good and poor students were designated by means of Average Achievement on the Metropolitan Achievement Test. HFD's of good and poor and special class pupils were compared for presence of 30 signs on HFD's which were known to differentiate between subjects with and without emotional problems.
Findings: Six signs occurred significantly more often on HFD's of poor pupils Kindergarten to second grade; none differentiated HFD's in grades three and four. 13 signs differentiated HFD's of special class pupils and good students; six of these were related to school achievement, and seven reflected emotional problems primarily. Six signs can be used to predict learning problems in school beginners.
Duration: Summer 1963-summer 1966.
Investigator(s): Elizabeth M. Koppitz, Ph.D., Psychologist, Board of Cooperative Educational Services, Yorktown Heights, N. Y.
Publication: Article planned for *Journal of Clinical Psychology*.

20-OS-4 SEPARATION OF THE SEXES IN GRADES ONE TO THREE

Purpose: To create educational interest and reduce emotional problems, especially among boys, by separating children in first three grades for academic work.
Subjects: 200 boys and girls in Duval County, Florida, already tested; and 450 boys and girls (150 in each grade for three grades) from first three grades of the Hammond, Louisiana, elementary schools.
Methods: Curricula have been and are being devised for express purpose of maintaining interests of each sex in educational materials and program. Pre- and post-testing on the Behavioral Classification Project behavior problem items, preschool readiness, and post-academic year achievement tests are being utilized.
Findings: Present results suggest that increased achievement and decreased behavioral problem incidents occur at least in the first grade.
Duration: August 1962-June 1968.
Investigator(s): Ralph Mason Dreger, Ph.D., Professor of Psychology, Louisiana State University, Baton Rouge, La. 70803.
Cooperating group(s): Duval County, Florida, school system; Hammond, Louisiana, school system; Florida Council on Training and Research in Mental Health.
Publication: *Scholastic Teacher* (in press); further publication will be in either the *Journal of Educational Psychology* or one of the elementary school journals.

20-OS-5 TRAITS OF SCHOOL ACHIEVERS FROM A DEPRIVED BACKGROUND

Purpose: To identify characteristics of successful school achievers among Negro children from a deprived environment; to test hypothesis that caution and control, need for achievement, self-confidence, positive attitudes towards authority, little anxiety, accuracy and critical ability, good memory, verbal skills, and healthy physique are associated with successful school achievement.
Subjects: 140 fifth graders, attending schools in slum areas, selected on basis of school achievement, half achieving at grade level, half two years below grade level.
Methods: Measurement of cognitive, affective, physical and social correlates of achievement, using objective and projective tests, rating scales, and family interviews.

Duration: September 1964-January 1967.
Investigator(s): Helen H. Davidson, Ph.D., Associate Professor, and Judith W. Greenberg, M.S., Instructor, School of Education, City College of the City University of New York, Convent Ave. at 139th St., New York, N. Y. 10031.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OS-6 REMINISCENCE AS A MEASURE OF EDUCATIONAL MOTIVATION

Purpose: To investigate whether a reminiscence difference holds for high school students of varying academic motivation. Reminiscence is defined as the increase in performance after a rest period.
Subjects: 104 senior males from a suburban Minneapolis high school - 52 overachievers (high motivation) and 52 underachievers (low motivation).
Methods: Subjects are given pursuit task, involving eye-hand coordination in following a moving target. Each subject is tested for eight straight minutes, rests for 10 minutes, and tested for one minute. Reminiscence score is taken as difference in performance between 10-second period before rest and 10-second period after rest.
Findings: Tended to support proposal that reminiscence is related positively to level of motivation.
Investigator(s): Douglas G. Sprague, M.A., Counseling Psychologist, 1220 Walpert St. No. 30, Hayward, Calif. 94541.
Cooperating group(s): Veterans Administration.

20-OV-1 MEASURES OF CHILD INVOLVEMENT IN AND ALIENATION FROM THE SCHOOL PROGRAM

Purpose: To assess the validity of measures of alienation, and to obtain information about how high school students orient to the school organization.
Subjects: 50 interview respondents in one high school, plus 2,500 questionnaire respondents in two additional high schools.
Methods: Interview and questionnaire.
Duration: June 1965-May 1966.
Investigator(s): Booth Buford Rhea, Jr., Ph.D., and Robert G. Williams, M.A., Assistant Professors of Sociology; and Richard A. Minisce, B.A., Instructor in Sociology, Boston College, Chestnut Hill, Mass. 02167.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education, May 1966.

20-OV-2 CHANGING CLASSROOM PEER RELATIONS AND STANDARDS IN GRADES FOUR, FIVE, AND SIX

Purpose: To discover teaching practices that lead to changes in the centrality of sociometric choices to a more diffuse distribution of choices, and changes in group standards that inhibit positive mental health and achievement to standards which tend to enhance them.
Subjects: An experimental group of 20 teachers and their pupils; a control group of 20 teachers and their pupils; and a second control group of 10 teachers and their pupils.
Methods: Teachers attend workshop on classroom peer processes. One

control group attends only fall seminars along with experimental group. Second control group receives no special training. Fall and spring classroom measures are gathered along with historical records on classroom practices tried by each teacher. Change analysis is carried out on these data.
Duration: September 1964-June 1967.
Investigator(s): Richard Schmuck, Ph.D., Associate Professor of Educational Psychology, Group Dynamics Center, Temple University, Philadelphia, Pa.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Data and results to be published in final report to the Office of Education; articles to be published describing the results.

20-OV-3 CLASSROOM TEACHING AND LEARNING AS A COMPLEX INTERACTIONAL GAME

Purpose: An exploratory study of interpersonal "ground rules" and "games" through which teaching and learning proceed in inner city, suburban, and rural elementary school classrooms, to permit identification and classification of implicit and explicit "rules" as established and reciprocally communicated by teachers and pupils in varied settings; to illuminate significant elements of teaching method and classroom behavior, suggest more effective teaching and intervention techniques, and serve as a source of more specific hypotheses about parameters of school interaction.
Methods: Observation of selected classrooms in several kinds of elementary schools throughout school year to obtain anecdotal material to serve as basis for interviews with classroom participants and others to permit a deeper exploration of perceptions and interpretations of classroom life; analytic induction, critical incident technique, and psychological ecology may be adapted to systematize data so that interactional commonalities and contrasts among various types of classrooms can be identified.
Duration: 1964-1966.
Investigator(s): Jerome Beker, Ed.D., Senior Research Associate, Youth Development Center, Syracuse University, 926 S. Crouse Ave., Syracuse, N. Y. 13210.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OY-1 THE EFFECTS OF INDIVIDUAL COUNSELING, MULTIPLE COUNSELING, AND TEACHER GUIDANCE UPON THE SOCIOMETRIC STATUS OF CHILDREN ENROLLED IN GRADES FOUR, FIVE, AND SIX

Purpose: To determine the effectiveness of selected guidance techniques.
Subjects: Students in grades four, five, and six in four schools in a midwestern community of 31,000.
Methods: Subjects were pretested to identify those with sociometric scores in the lower 50 percentile. Subjects were randomly assigned to various treatment conditions including control. Following treatment, subjects were retested and statistical treatment of data conducted. Gain score in sociometric status served as criterion measure.
Findings: No significant differences were found among various techniques used or between different levels of social class of subjects in the study.
Duration: January-June 1965.
Investigator(s): Frank Biasco, Ed.D., Assistant Professor, School of Education, Indiana University, Bloomington, Ind. 47405.
Cooperating group(s): Indiana University; Bloomington Metropolitan School System; Director of Pupil Personnel Services, Indiana State Department of

Education.
Publication: Available through Studies in Education 1965, School of Education, Indiana University, $1.50 per copy; also Library Microfilms, University of Michigan, Ann Arbor, Mich.

20-OY-2 ADOLESCENT STUDY UNIT

Purpose: To discover means by which underachieving students may be enabled to achieve a more adequate total integration with their environment.
Subjects: Underachieving students identified by school personnel as having adjustment problems.
Methods: Child and parent are referred to Adolescent Study Unit for evaluation. Data collection includes school history, personal and family history, battery of psychological tests, and psychiatric interviewing.
Duration: October 1965-not reported.
Investigator(s): Benjamin Sher, M.D., Chief, Psychiatric Inpatient Services, Ben Taub General Hospital, Houston, Tex. (Reported by Ralph Anderson, Counselor, Pershing Junior High School, 7000 Braes Blvd., Houston, Tex. 77035.)
Cooperating group(s): Baylor University School of Medicine.

20-OY-3 A COHORT STUDY OF SCHOOL WITHDRAWALS WITH IMPLICATIONS FOR MENTAL HEALTH

Purpose: Operating on the premise that school withdrawals constitute a risk group from a mental health viewpoint, to make a brief background study of the extent of, and reasons for, withdrawal of students in a given generation or cohort, from a predominately rural county school system; to explore program implications of different modes of withdrawals which occur within a particular school system.
Subjects: All white students who were at one time or another members of the class which began first grade in 1946 and graduated in 1958; total population of cohort consisted of 646 students; of these, 281 were enrolled in first grade at start of study in 1946-47; the remainder, 365 students, joined the class at various points between first and twelfth grades.
Methods: Subjects were followed over a twelve-year period. Each time a withdrawal was recorded on the school record card, it was noted and recorded on a tally sheet. In this manner the outcome of all but 130 students was accounted for. This latter group simply disappeared in the records. Usually the disappearance occurred between the end of the second semester of one year and the beginning of the first semester of the following year. It is suspected that most of these students either moved out of the county during the summer months or in the case of those students sixteen years and over, dropped out of school.
Findings: Five specific withdrawal groups were identified, and time points at which withdrawal was most likely to occur were located. On the basis of certain background information it was possible to predict in advance students who were most apt to withdraw and the form the withdrawal would take.
Duration: 1958-June 1966.
Investigator(s): Fortune V. Mannino, Ph.D., Director of Consultation Services, Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd., East, Adelphi, Md. 20783.
Publication: To be published in Community Mental Health Journal about June 1966.

20-OY-4 AN EVALUATION OF THE EFFECTIVENESS AND EFFICIENCY OF GROUP AND INDIVIDUAL COUNSELING WITH ISOLATED ADOLESCENTS

Purpose: To see if group counseling can be effective and efficient in helping adolescents who are not well-liked by their classmates.
Subjects: Isolates from 10 to 12 classrooms in each of five secondary schools in Tennessee, New York, Minnesota, and Wisconsin.
Methods: Pre-, post-, and follow-up-testing of reputation with sociometric question included, and self-concept scale; group and individual counseling with experimental and control groups; analysis of total groups by testing and by counselor looking for changes in group acceptance and self-acceptance.
Findings: Reputation test and sociometric question show reliability with adolescents. Adolescents can differentiate between personality characteristic more definitively than younger groups previously using the reputation tests according to factor analysis.
Duration: November 1964-August 1966.
Investigator(s): Clarence J. Dunkleberger, M.S., School Psychologist, Norwich Central Schools, Norwich, N. Y.
Cooperating group(s): Norwich (N.Y.) Central Schools; Montevideo (Minn.) Public Schools; Nashville (Tenn.) Public Schools; Waterville (N.Y.) Central Schools.
Publication: Will publish results of various aspects in several journals.

20-OY-5 A GRADED PROGRAM OF AFTER-SCHOOL VOCATIONAL TRAINING TO KEEP POTENTIAL DROPOUTS IN SCHOOL

Purpose: To discover methods for helping low income and emotionally disturbed adolescents, borderline dropouts, remain in school through a program combining after-school work experiences and group and individual counseling; to prevent further alienation from society; and to compare individual and family characteristics of dropouts and non-dropouts.
Subjects: 50 14- to 16-year olds per year from one junior high school.
Methods: Subjects are provided with after-school paid work experiences for 10 to 12 hours per week for 40 weeks--one school year only. Experiences include supervised work assignments in neighboring settlement houses, such as maintenance, clerical and group assistant leadership capacities, positions in industry and retailing, etc. Adequate evaluation is included.
Duration: Not reported-1970.
Investigator(s): Daniel R. Rubenstein, The Educational Alliance, 197 E. Broadway, New York, N. Y. 10002.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

20-OY-6 PREDICTION OF DROPOUTS AMONG URBAN NEGRO HIGH SCHOOL BOYS

Purpose: To test impact of certain factors of Negro pupil's life organization upon dropout behavior, and to assess power of these factors to predict behavior.
Subjects: 500 Negro high school boys who registered at seventh grade in fall term of 1957, but are known not to have registered in any school for spring term of 1963; and 500 who registered for each intervening semester period.
Methods: Retesting older models of relationship between cultural experiences and social success by isolating complexes of independent

variables and testing their association with dropout behavior as expressed by Negro pupils; identifying most critical factors which accurately distinguish dropouts from those who stay in school; and extending a method of prediction through development of prognostic tables by which potential dropouts can be accurately identified before their withdrawal from school. Factors derived from an interview schedule and significantly associated with dropout behavior form basis for prognostic tables.
Duration: July 1964-June 1967.
Investigator(s): Henry A. Bullock, Ph.D., Professor of Sociology, Texas Southern University, 3201 Wheeler Ave., Houston, Tex. 77004.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OY-7 EFFECTS OF A SUMMER COUNSELING PROGRAM WITH POTENTIAL DROPOUTS

Purpose: To determine what effects, if any, a summer counseling program has on subsequent behavior of several different types of potential dropouts.
Subjects: Potential dropouts divided into three groups: those who are counseled with their parents or guardians; those who are counseled, but not with parents or guardians; and a control group which does not participate in any summer counseling.
Methods: Collection of data on: number returning to school; number persisting in school subsequent year; comparison of grade point averages for school year preceding summer counseling and school year following it; attendance before and after summer counseling; and frequency of disciplinary cases among groups after summer counseling.
Duration: 1964-1965.
Investigator(s): Dwight Safar (formerly) Director of Guidance, Wyoming State Department of Education, Capitol Building, Cheyenne, Wyo. (Reported by Walter Reusser, Wyoming State Department of Education.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-OY-8 DROPOUT OF AMERICAN INDIANS AT THE SECONDARY LEVEL

Purpose: To analyze and describe social situation and process underlying poor academic achievement and high rate of dropout among Sioux Indians of high school age; to investigate experiences of dropouts and non-dropouts from impoverished reservation communities.
Subjects: Random sample from among communities of Oglala Sioux of the Pine Ridge Reservation, S. Dak.
Methods: Unstructured interviews, often conducted in native language of Lakota via interpreters, supplemented by sentence completion schedules in English.
Duration: 1964.
Investigator(s): Murray L. Wax, Ph.D., Associate Professor of Sociology, and Rosalie H. Wax, Ph.D., University of Kansas, Lawrence, Kans. 66045.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education; mimeographed copies available from United Scholarship Service, Denver, Colo.; Midcontinent American Studies Journal 6:2:164-170, Fall 1965.

Specific skills

20-PA-1 EFFECTS OF A TRAINING PROGRAM FOR TEACHING A MATHEMATICAL CONCEPT TO PRESCHOOLERS

Purpose: To examine effects on cognitive and affective behavior of a training program designed to teach the mathematical concept of one-to-one correspondence to nursery school children.
Subjects: 38 subjects, three, four, and five years old, enrolled in the University Nursery School in spring, 1966.
Methods: General design is a levels by treatment paradigm. The levels variable is chronological age. The treatment variable is type of mathematical experience, a set of specifically designed experiences prepared to teach a mathematical concept, or a set of nursery school experiences generally included in a nursery school program to facilitate mathematical understanding.
Duration: March-October 1966.
Investigator(s): Therry N. Deal, Ph.D., and Fannie Lee Brooke, M.S., Assistant Professors of Child Development, School of Home Economics, University of Georgia, Athens, Ga. 30601.
Cooperating group(s): Research and Development Center in Educational Stimulation, University of Georgia.
Publication: Results available in progress reports of the Research and Development Center.

20-PA-2 DEVELOPMENT OF "MATH ATTITUDES" IN ELEMENTARY AND SECONDARY SCHOOL PUPILS

Purpose: To identify and, if possible, trace the etiology of so-called math attitudes--emotionalized reactions to arithmetic and mathematics--in elementary and secondary school pupils.
Subjects: 30 subjects from each grade, 3 to 12, from whom 40 subjects are drawn from four "math attitudes" levels by stratified random sampling within sexes and grade levels.
Methods: The Math Attitude Scale, Arithmetic and Mathematics Achievement Test, and general anxiety measures (Children's MAS and Taylor MAS) will be administered to subjects. With the subsample of 40 subjects, a general temperament test (CPQ, HSPQ) and self concept measures (Wide Range Self Concept Scale, rated BAP Figures) will be utilized to assess concomitant of "math attitudes."
Duration: February-August 1966.
Investigator(s): Ralph Mason Dreger, Ph.D., Professor of Psychology, and W. Randall Ratliff (Ph.D. Candidate), Louisiana State University, Baton Rouge, La. 70803.
Cooperating group(s): Laboratory School, Louisiana State University.
Publication: Either *Journal of Educational Psychology*, *Journal of Educational Research*, or a similar journal.

20-PD-1 THE EFFECT OF A SUMMER TELEVISION READING PROGRAM ON READING ACHIEVEMENT OF CHILDREN

Purpose: To determine (1) loss in reading that occurs during the summer for children who have just completed first grade, and (2) effect that a

summer television program has on reading achievement.
Subjects: Approximately 3,000 children who completed first grade in the Evansville-Vanderburgh School Corporation in June 1965 and June 1966.
Methods: Subjects are tested in reading achievement before and after summer. For second part of study, special workbooks and summer television teaching program are developed and tested on subjects for a summer, with achievement tests to measure loss or gain as result of the program.
Duration: January 1965-December 1966.
Investigator(s): Jack W. Humphrey, Director of Reading Services, Evansville-Vanderburgh School Corportion, 911 Walnut St., Evansville, Ind. 47713.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report available from Educational Research Information Center, Office of Education.

20-PD-2 WORD FREQUENCIES IN SPOKEN LANGUAGE OF SIXTH AND TENTH GRADE CHILDREN

Purpose: To compare word frequencies of 3,000 word samples of spoken language (per child) of two different age groups; to inspect a number of word lists and ratios.
Subjects: 15 sixth grade boys and 15 tenth grade boys of normal intelligence from Salt Lake City schools.
Methods: Children were each given a small tape recorder to record spoken language. Recordings were restricted to out-of-school hours and children instructed not to read into recorder nor to make special speeches. Approximately 5,000 words were obtained for each child, and 2,500 of them randomly chosen. These words were put on IBM cards and processed by a computer program, developed by Dr. John A. Starkweather at the University of California. Computer program was also designed to give word lists such as word frequencies of self references (I, me, mine, etc.); other references (you, your, them); negative references (no, none, never); positive references (yes, O.K.) etc. Ratios obtained from this computer program were worked on a correlation matrix and factor analysis related to achievement and other variables.
Duration: June-September 1965.
Investigator(s): Ernst G. Beier, Ph.D., Director of Clinical Training, Department of Psychology, University of Utah, Salt Lake City, Utah.
Cooperating group(s): University of California, San Francisco Medical Center.
Publication: Paper read at Inter-American Congress of Psychology, Lima, Peru, 1966. These results to be included in larger study and compared with spoken language patterns of school dropouts, mentally retarded, and gifted children.

20-PD-3 THE ANALYSIS OF READING SKILL

Purpose: To study basic psychological processes underlying reading, such as perceptual learning and attention; to experiment on search strategy and detection with graphic materials, on decoding spelling patterns to sound, on oral reading representing attempts to externalize process of reading, and on utilization of higher order constraints.
Subjects: First grade pupils.
Methods: Data on first grade reading, gathered by a psychologist and a linguist, are being intensively analyzed to describe development of oral reading, reading and speech styles, and reading errors. Relation of

pictorial perceptions to reading is being explored in experiments rising from hypotheses developed from theory of relation between perception of things and mediated perception of things. Relationship between written and spoken English is being studied, a major question being which of several formal ways of setting forth the morphon-to-letter and morphon-to-phoneme functions is preferable and how this new characterization of relation of written English and spoken English will affect the ordering of pedagogical materials.
Duration: July 1965-June 1968.
Investigator(s): Eleanor J. Gibson, Ph.D., Senior Research Associate, and James J. Gibson, Ph.D., Professor, Psychology Department; Charles F. Hockett, Ph.D., Professor, Departments of Linguistics and Anthropology; and Harry Levin, Ph.D., Professor, Departments of Child Development, Education, and Psychology, Cornell University, Ithaca, N. Y. 14850. (Reported by Nancy Meltzer, Research Associate, Project Literacy, Cornell University.)
Publication: Professional journals.

20-PD-4 VOCALISM IN SILENT READING

Purpose: To determine incidence of implicit speech (lip reading) as manifested during silent reading by two groups of intermediate grade children; and to determine if implicit speech is a desirable, natural, and helpful adjunct of reading and learning, or if it is an undesirable adjunct of reading and learning.
Subjects: A random selection of two groups of reading achievers and reading retardates.
Methods: Correlations on such variables as intelligence, school achievement, socio-economic level, reading grade, etc.
Duration: Not reported-December 1966.
Investigator(s): Donald L. Cleland, Ph.D., Director, Reading Laboratory, University of Pittsburgh; and O. S. Ray, Ph.D., Chief, Psychological Research Laboratories, Veterans Administration Hospital, Leech Farm Rd., Pittsburgh, Pa. 15206.
Cooperating group(s): Veterans Administration.

20-PD-5 IDENTIFICATION OF FACTORS THAT MAKE FOR FUTURE SUCCESS IN READING AND IDENTIFICATION AND DIAGNOSIS OF POTENTIAL READING DISABILITY CASES AMONG KINDERGARTEN CHILDREN

Purpose: To test hypotheses that: (1) factors making for success in reading for individual pupils can be identified in the kindergarten; and (2) potential reading disability cases can be identified and diagnosed in the kindergarten.
Subjects: 300 kindergarten children from high, middle, and low socioeconomic districts of Cheyenne, Wyoming public schools.
Methods: Evaluation of subjects during kindergarten year on variety of traits and characteristics using background, WISC, creativity test, sociometric score, social-emotional rating by teacher, reading readiness rating by teacher, reading and numbers readiness test, and end of first and second grade reading tests.
Duration: Not reported-summer 1968.
Investigator(s): Wilma E. Hirst, Ed.D., Coordinator of Guidance and School Psychologist, School District No. 1, School Administration Building, Cheyen[illegible] Wyo. 82001.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PD-6 A STUDY IN DEPTH OF FIRST GRADE READING: AN ANALYSIS OF THE INTERACTIONS OF PROFESSED METHODS, TEACHER IMPLEMENTATION, AND CHILD BACKGROUND

Purpose: To explore effect of interactions between published reading program, teacher's implementation and understanding of that program, and varying characteristics of pupils, on various components of reading achievement in first grade.
Subjects: Children from 12 first grade classes in socially disadvantaged neighborhoods in New York City.
Methods: Subjects are evaluated on skills and abilities underlying reading at beginning of school year, and on reading measures at end of school year. In four classes, observations are made on a weekly basis and evaluation done at midyear. In other eight classes, there are four or five classroom observations during school year. Relationships of children's initial skills and abilities, professed methods used, and teacher's implementations of those methods to final reading achievement measures are analyzed.
Duration: Not reported-February 1966.
Investigator(s): Jeanne S. Chall, Ph.D., Associate Professor; Shirley C. Feldmann, Ph.D.; Florence G. Roswell, M.A.; and Gladys Natchez, Ph.D., Assistant Professors, Department of Education, City College of the City University of New York, Convent Ave. at 135th St., New York, N. Y. 10031.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PD-7 A STUDY OF A LONGITUDINAL FIRST GRADE READING READINESS PROGRAM

Subjects: Pupils of 32 experimental and 32 control classes.
Methods: Following readiness tests, experimental subjects either begin a basal reading program or receive two months of intensive readiness training keyed to needs in areas of visual perception, auditory discrimination, and auditory language skills. All subjects are retested at intervals of two months in both experimental and control classes to determine development in these facets of readiness, as a result of special training or incidental outcomes of a basal reading program. After each retesting, those ready for the basal program enter it; those not ready receive further intensive training. After six months, all subjects in experimental classes enter a reading program. Control classes all enter reading program at appropriate time as determined by teacher judgment, and are retested three times by special tests. Final outcomes are estimated by a variety of oral and silent reading tests.
Duration: September 1964-December 1965.
Investigator(s): George D. Spache, Ph.D., Professor of Education, University of Florida, Gainesville 32601; Hazen A. Curtis, Ed.D., Professo of Education and Head of Educational Research and Testing, Florida State University; and Paul H. Jacobs, Consultant in Language Arts, Florida State Department of Education, Tallahassee, Fla.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PD-8 TEACHER AND PUPIL ATTITUDE AND PERFORMANCE IN RELATION TO NUMBER OF BOOKS USED IN FIRST GRADE READING

Purpose: To examine teacher attitude and performance and pupil attitude and performance when selected first grade groups represent extremes on a continuum of numbers of books used in the reading program.

Subjects: Contrasting teacher groups of approximately 40 to 50 each and pupil groups matched on several key factors.
Methods: Teacher groups will be identified through a questionnaire study and by rating of supervisors. Examination of each teacher's program will be made through application of appropriately developed measures at the one-third, two-thirds, and terminal points of school years. At same time pupil groups will be studied. Particular teacher and pupil measures will be developed; Teacher Observation, Self-Report and Attitude Scales, and Pupil Attitude measures will be revised and refined; standardized and other recognized measures will also be used.
Duration: 1965-1966.
Investigator(s): Lyman Hunt, Jr., Ed.D., Professor of Education, University of Akron, 302 E. Buchtel Ave., Akron, Ohio 44304.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PD-9 EXPERIMENTAL USE OF THE "IMPRESS METHOD OF READING HABILITATION"

Purpose: To determine to what degree the reading level of a child with a severe reading problem (at least three years below chronological grade placement) can be raised through the "Impress Method of Reading Habilitation." This method attempts to eliminate "phonetic boundness" and its accompanying tension over failure to read and to establish a feed-back system involving hearing, vision, and speaking implications in terms of the reconditioning of a reading pattern.
Subjects: 49 children from Sonoma County closely matched for sex, I.Q., chronological age, and grade placement.
Methods: A prime control group of nine received no instruction other than that received in regular classroom sessions. Control and experimental groups of 20 students each received ten minutes of individual instruction a day for six weeks, the former using conventional reading techniques. In experimental sessions, instructor and student read in unison at rapid rate, with instructor's voice directed into student's ear. Student was permitted to use his finger as a locator. There was no attempt to teach sounds or word recognition, and each child was given much positive motivation.
Findings: According to the Gates Silent Reading Test, all three groups were at relatively the same reading level at the beginning of the experiment. Post-experimental analysis of reading ability indicated a mean gain of 3.2 (months) by the experimental group, a gain of .2 by the control group, and a loss of .2 by the prime control group. Tests administered three months later showed a consistent gain of .3 months was maintained above the preceding test results by the experimental group.
Duration: November 1964-June 1965.
Investigator(s): Charles Gardner, Ph.D., Guidance Consultant; Reba Sones, Psychologist; Yvonne Black and Vida Santucci, Experimental Reading Teachers, Sonoma County Schools, Santa Rosa, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PD-10 THE EFFECT OF SPECIAL INSTRUCTION ON THE ABILITY OF SEVENTH AND EIGHTH GRADE PUPILS TO WRITE COMPOSITION AND UNDERSTAND POETRY AND SHORT FICTION

Purpose: To test hypothesis that students who are taught to analyze their own spoken and written sentences and sentences of representative professional writers by a structural grammar approach, and who are encouraged to create a variety of sentences by a generative grammar approach will

write more mature compositions and will understand poetry and short fiction better.
Subjects: Four seventh grade and four eighth grade classes from a college demonstration school and a public junior high school provide both experimental and control groups.
Methods: Variant forms of standardized tests are given as pre- and post-tests to measure student achievement; samples of student writing are examined before and after study, and an attitude scale taken by students to determine their interest in experimental method and materials; analysis of covariance, factor analytic procedures, and test validation procedures are used in evaluating data of study.
Duration: June 1965-May 1966.
Investigator(s): Robert W. Blake, Professor of Education and Chairman, Department of Secondary Education, and Marion Nestle, Assistant Professor of Education, Demonstration School, State University College, Brockport, N. Y. 14420.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PG-1 THE DEVELOPMENT OF SPECIALIZED PROGRAMS FOR SINGING IN THE ELEMENTARY SCHOOLS

Purpose: To determine incidence of nonsinging in terms of its acuteness as an adverse effect on task of upgrading musical experiences for elementary school children.
Methods: Examination of various kinds of nonsinging difficulties in wide variety of school situations with children of varying backgrounds, including deprived; development of diagnostic tests to determine causes of nonsinging; classroom observation of remedial techniques used by music supervisors and teachers of elementary music with nonsinging pupils. Resulting procedures for helping nonsingers learn to sing are tested in experiments of 18 weeks duration in 12 classrooms of varying school situations and backgrounds.
Duration: July 1965-June 1968.
Investigator(s): A. Oren Gould, Ed.D., Associate Professor of Music Education, Music Department and Campus School, Western Illinois University, Macomb, Ill. 61455.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PG-2 MUSICAL ABILITY UTILIZATION: SCREENING AND TEST CONSTRUCTION AND EDUCATIONAL OUTCOMES

Purpose: To develop a standardized test of musical potential so that this ability can be measured; to investigate and evaluate effect of a program for musical development on pupils who are below standard achievement academically and who show good potential in music.
Subjects: Sixth and seventh grade students in special service schools in New York City.
Methods: Subjects are tested in elements of musical ability; data on this and previous aptitude testing and music performance are used to achieve good measurement methods. Test-retest and methods of correlation furnish reliability; validity is approached by retrospective correlation of aptitude measurements and performance. Randomly selected equated groups with equivalent musical potential are assigned to participation or nonparticipation in music program. Music instruction is given during class

time. For three-year period of music program, multiple analysis and comparison techniques are used to evaluate effects of program.
Investigator(s): Joseph O. Loretan, Deputy Superintendent of Schools, Board of Education of the City of New York, 110 Livingston St., Brooklyn, N. Y. 11201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PG-3 A COMPARISON OF THE DEVELOPMENTAL DRAWING CHARACTERISTICS OF CULTURALLY ADVANTAGED AND CULTURALLY DISADVANTAGED CHILDREN

Purpose: To develop a scale for assessing the treatment of space and esthetic quality in children's drawing and then to identify differences, if any, among the drawings made by children in each of the two populations.
Subjects: 200 children from each of four grades (one, three, five, and seven), a total of 800 children, selected from middle class suburban communities and slum communities; half of the children are Negro, and half are white; middle and lower classes are equally represented in both racial groups.
Methods: All subjects are asked to make drawings under standardized conditions.
Duration: Not reported-December 1966.
Investigator(s): Elliot W. Eisner, Associate Professor of Art Education, School of Education, Stanford University, Stanford, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-PG-4 AN EXPERIMENTAL STUDY OF PARENT PARTICIPATION AS AN AID TO THE CHILD'S LEARNING

Purpose: To determine whether parent participation could be of value in child's learning of school subject matter (elementary science) when parent cannot view televised instruction offered in school. It was hypothesized that: (1) children of parents who volunteered to help with study of science at home and who were given basic science materials would perform better on a science achievement test than children of parents who volunteered to help but who did not receive materials; (2) children of volunteering parents who did not receive materials would perform better on a science achievement test than children of nonvolunteering parents.
Subjects: 276 fourth, fifth, and sixth grade pupils in 11 classes from 8 schools within Santa Clara County, California.
Methods: Analysis of covariance was used to test overall significance of differences between groups; adjusted group means were also compared. Pretest score and I.Q. were used as covariates. In addition, a random sample of 104 volunteer parents was interviewed in order to obtain information related to children's performance on tests of achievement in science. A random sample of 43 nonvolunteers was also interviewed to determine pertinent differences between parent groups who selected themselves to experimental conditions (design controls for self-selection). Differences between volunteer and nonvolunteer groups were tested by Chi-square.
Findings: Hypothesis (1) was not supported; hypothesis (2) was supported at high statistical level. Materials provided for volunteering parents appeared to be irrelevant to performance of their children when comparisons were made with performance of children whose parents did not volunteer. Differences between parent groups appeared to be attributable largely to

education and its implications for approaches to available time and sources of information.
Duration: June-July 1965.
Investigator(s): Donald W. Johnson, Ed.D., Consultant, Bureau of NDEA, California State Department of Education, 721 Capitol Mall, Sacramento 95814; Warren L. Wade, Ed.D., Station Manager, KTEH, Channel 54, Office of Education, County of Santa Clara; and Serena E. Wade, Ph.D., Research Associate, County Office of Education, 70 W. Hedding St., San Jose, Calif.
Cooperating group(s): Santa Clara County Office of Education; California State Department of Education; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in educational research journal; final report to Office of Education.

Special education

20-QA-1 DEMONSTRATION OF THE SIGNIFICANCE OF A CONSULTANT-TEACHER FOR THE GIFTED TO A SMALL RURAL SECONDARY SCHOOL

Purpose: To learn effect, significance, and importance of a trained gifted-teacher-consultant in the education of gifted students in a small secondary school; to establish and evaluate such a program within the Kansas education system.
Subjects: 20 students ages 13.5 to 17 ranging in I. Q. from 119 to 150.
Methods: The secondary program for the gifted is developed within the framework of two definite types of administrative organizations:
(1) special grouping of gifted students for seminar-type instruction, and
(2) enrichment program for gifted students in heterogeneous classes of the regular secondary curriculum. Basic curriculum is one of scientific inquiry, utilizing local resources of industry and social sciences. Evaluation of program is subjective and related to "before and after" ratings.
Findings: Subjects show improved study skills, wider repertories of reading content, improved vocational and personal goal planning, and beginnings of personal unification of diverse disciplines into a science of science.
Duration: September 1964-August 1965.
Investigator(s): Paul R. Ackerman (formerly) Director, Programs for the Gifted, and James E. Marshall, Director, Division of Special Education, State Department of Public Instruction, State Capitol, Topeka, Kans. 66612; Louis Fliegler, Ph.D., Coordinator of the Education of Exceptional Children, Department of Psychology, University of Denver, Denver, Colo.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report available 1966, Kansas State Department of Public Instruction.

20-QB-1 EAU CLAIRE COUNTY YOUTH STUDY PHASE III

Purpose: The study has two parts. The first is a pilot experiment using university upper classmen as tutors for children nominated from third grade as exhibiting disapproved classroom behavior and as being in need of remedial reading. The second part is a longitudinal study of subjects nominated in Phase I of the research project (see Bulletin 14, Research

Relating to Children).
Subjects: For the first part, 20 third graders, 10 experimental and 10 control; and for the second part, 1,550 children nominated in 1961 and 1962 from third, sixth, and ninth grades.
Methods: In pilot study, a battery of psychological and reading tests plus tutoring for control group.
Duration: May 1965-April 1968.
Investigator(s): John R. Thurston, Ph.D., and James J. Benning, Ed.D., Professors of Psychology, Wisconsin State University, Eau Claire, Wis. (Reported by Mrs. Trygve Ager, Administrator, Eau Claire Youth Study, 718 W. Clairemont Ave., Eau Claire, Wis.)
Cooperating group(s): Division for Children and Youth, Wisconsin State Department of Public Welfare; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Phase I final report, "Classroom Behavior: Background Factors and Psycho-Social Correlates," and Phase II final report, "Delinquency Proneness and Classroom Behavior," available from Eau Claire Youth Study; "Delinquency Proneness of Urban and Rural Youth," published in Journal of Research in Crime and Delinquency, Vol. 2, January 1965.

20-QB-2 AN ELEVEN-MONTH GROUP COUNSELING PROGRAM FOR GIFTED UNDERACHIEVERS

Purpose: To help talented underachievers find a place in a more psychologically meaningful group; to improve their interpersonal relationships at school and at home, and their classroom behavior and performance, academically and socially.
Subjects: 30 students in grades three, four, five, and six.
Methods: Group counseling based on the principles of Adlerian family counseling, conducted weekly for 40 to 45 minutes with five groups of seven to nine students from kindergarten through sixth grade. These talented low-producers (referred to as dysfunctioning children) were identified as gifted in one or more of following areas: academics, creativeness, leadership, and/or kinesthetic skills. Teachers and principals meet for weekly one-hour session and parents meet for two-hour session under leadership of qualified counselor experienced in Adlerian family counseling.
Findings: Findings from an 80-item parent checklist and a similar teacher checklist were subjected to a binomial test indicating at a significance level of .001 that the 30 students in the experimental group showed significant change for the better in behavior and attitudes at school and at home.
Duration: March 1964-June 1965.
Investigator(s): Manford Sonstegard, Ph.D., Professor of Guidance and Counseling, Southern Illinois University, Edwardsville; and G. E. Stormer, Director, Demonstration Center, School District 172, 1200 Maine St., Quincy, Ill.
Publication: Full report available in Progress Report No. 3, "A Demonstration of Group Counseling Procedures to Help Talented Underachievers in the Elementary School," Quincy Public Schools, Quincy, Ill., 1965.

20-QD-1 GROUP USE OF PROGRAMMED MATERIALS WITH RETARDED CHILDREN

Purpose: To determine (1) whether programmed materials can be used with retarded children under group-study conditions, and (2) which types of reinforcers are most effective in maintaining children's attention and effort.

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Subjects: Six retarded and six normal children.
Methods: In group-study condition, subjects are seated before a screen upon which is flashed a frame of programmed material. Each subject in turn reads a question out loud and attempts a correct response before it is flashed on the screen. In order to maintain student attention and effort, extrinsic and social reinforcers are used, including group approval which attends responding in the group's presence, cooperation, and competition.
Duration: Not reported-July 1966.
Investigator(s): Robert L. Crist, Ph.D., Associate Professor of Psychology, Illinois State University, Normal, Ill. 61761.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-QG-1 OPERATION HEADSTART FOR DISTURBED CHILDREN

Purpose: To determine appropriate curriculum and teaching methods for preschool emotionally disturbed children which may affect positively subsequent adjustment at ages six, seven, and eight in a public school setting; to evaluate periodical learnings and adjustments of four- and five-year old emotionally disturbed and mentally retarded children; to evaluate growth and development of these children as a function of degree of parental acceptance of children's deviation; to compare developmental sequences of emotionally disturbed children with that of the so-called normal, especially as it affects physical, social-emotional, and speech developmental patterns.
Subjects: A class of six children, ages three to six, evaluated by St. Luke's Child Psychiatric Clinic.
Methods: Examination based on Connor-Talbot Curriculum Guide administered one month after entrance and at end of year; anecdotal records by teacher and student observers; speech and language growth as well as visual-perceptual evaluation to be measured at beginning of year and in spring; psychiatric evaluation at admission and during summer of 1967.
Duration: September 1965-June 1967.
Investigator(s): Frances P. O'Connor, Ph.D., and Abraham Tannenbaum, Ph.D., Professors, Teachers College, Columbia University; and Joan Miller, B.A., Teacher of Class, New York, N. Y. (Reported by Dr. Nathan Brown, Associate Director, Center for Urban Education, 33 W. 42nd St., New York, N. Y. 10036.)
Cooperating group(s): Center for Urban Education; Psychiatric Division, St. Luke's Hospital.
Publication: Report to be prepared by Dr. O'Connor.

20-QJ-1 PRESCHOOL CHILDREN COMPARATIVE PERFORMANCE ON THE HEADSTART SOCIAL BEHAVIOR INVENTORY

Purpose: To investigate the impact of a Headstart program on the social behavior of preschool children.
Subjects: Two preschool classes of 30 children of similar socio-economic background and chronological age level.
Methods: Administration of social behavior inventory during second and seventh weeks of Headstart program by classroom teacher; statistical analysis of sample data; scores statistically related and compared.
Findings: No difference in positive aspects of pupil behavior. Repetition of null hypothesis in negative aspects of pupil behavior indicates that some negative attributes of pupil behavior were corrected for this group of pupils during the seven-week Headstart program.

Duration: September-November 1965.
Investigator(s): Joseph Caliguri, Ph.D., Special Coordinator, Equal Educational Opportunities In-Service Program, Clark County School District, P.O. Box 551, Las Vegas, Nev. 89101.
Cooperating group(s): Clark County School District teacher personnel; Clark County School District Department of Instructional Services.
Publication: Paper will be submitted for publication in appropriate professional journal. Report will be kept on file in Clark County School District Department of Instructional Services, Research and Evaluation.

20-QJ-2 A STUDY OF EFFECTS OF FIRST YEAR OF TRAINING ON THREE- AND FOUR-YEAR OLD ENVIRONMENTALLY DEPRIVED SPANISH-AMERICAN CHILDREN

Purpose: A longitudinal program to test effectiveness of educational intervention in early childhood in the promotion of greater school success and the alleviation of concomitant problems of school failure such as discrimination, poverty, dropping out, mental retardation, emotional disturbances, unemployability, and delinquency. Specifically, to develop greater sensory and perceptual acuity, effective communication skills, problem-solving and related cognitive abilities, positive self concept, and methods and instruments for evaluating growth and development in these areas.
Subjects: (1) 30 Spanish-American 3- and 4-year-olds from families of lower-lower class as determined by occupation, income, and educational criteria; (2) matched Spanish-American control group (do not attend New Nursery); (3) group of Anglo middle and upper class children in a parallel experimental program; and (4) matched control group of Anglo children in traditional nursery programs.
Methods: Pre- and post-program assessments, as well as ongoing observational (including anecdotal) and related case studies. Data gathering techniques will include one-way glass, sound and video-tape recordings; pedagogical methods of Deutsch, Montessori, Moore, Piaget, et al., will be employed.
Findings: Superior success in kindergarten of first year "graduates" and favorable prognosis for successful completion of first grade as predicted by teachers. A mean increase of 7.64 I.Q. points on PPVT was found after seven months--a gain significant at the .01 level. Binet (1960 L-M) increases were noteworthy but not significant at the .05 level.
Duration: September 1964-indefinite.
Investigator(s): Glen Nimnicht, Ed.D., Associate Professor of Education; John Meier, Ph.D., Assistant Professor of Psychology; Barbara Mickey, Ph.D., Assistant Professor of Anthropology; and Gary Willoughby, M.A., Assistant Professor of Sociology, Colorado State College, Greeley, Colo. 80631.
Cooperating group(s): Boettcher Foundation, Denver; Ford Foundation; U. S. Office of Economic Opportunity.
Publication: Journal of Research, Colorado State College, June 1966; Chapters in The Disadvantaged Child, Vols. I and II, Seattle: Special Child Publications, 1966.

20-QJ-3 INCREASING THE ACADEMIC ACHIEVEMENT OF CULTURALLY DISADVANTAGED YOUTH

Purpose: To determine feasibility of instructing bright, low-achieving Negro boys in skills related to educational achievement, and to determine whether students respond differentially to instructional procedures.
Subjects: Junior high school Negro boys, judged by their teachers to be

able to learn but not doing so.
Methods: Establishment of small groups, including control groups, on basis of high and low achievement motivation; instruction in factors presumably related to academic achievement--fear of failure, subjective probability of success, peer group relationships, modes of expressing hostility, etc.; assessment of outcomes in terms of changes in academic performances.
Duration: February 1965-July 1966.
Investigator(s): Lawrence H. Stewart, Ed.D., Professor of Education, and Robert W. Moulton, Ph.D., Assistant Professor of Education, University of California, Berkeley 4, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report to Office of Education; perhaps one journal article.

20-QJ-4 PRESCHOOL READINESS CENTERS IN THE CITY OF EAST ST. LOUIS, ILLINOIS

Purpose: To evaluate effect of preschool training of socially disadvantaged children upon their readiness for school; to develop a curriculum suitable for them; to change opinions of parents of socially disadvantaged children concerning importance of education as a means to economic security.
Subjects: 200 lower class children, ages one and one-half to six, in East St. Louis, Ill.
Methods: Selected AFDC mothers are trained by professional nursery school teachers to work with preschool culturally deprived children in a program designed to prepare these children for school entrance. Structured activities to promote cognitive development, particularly communication skills, comprise core of program, with supplementary training for social, emotional, and physical development. Pre- and post-testing provide data concerning verbal skills and general school achievement which are used for evaluating results of project.
Duration: October 1965-September 1968.
Investigator(s): J. Robert Russo, Ed.D., and Naomi Naylor, Delinquency Study Project, Southern Illinois University, Edwardsville, Ill. 62025.
Cooperating group(s): Delinquency Study Project, Southern Illinois University; Illinois State Department of Public Aid.
Publication: Periodic reports planned through duration, and upon completion of project.

20-QJ-5 THE DEVELOPMENT AND EVALUATION OF A DIAGNOSTICALLY BASED CURRICULUM FOR PSYCHOSOCIALLY DEPRIVED PRESCHOOL CHILDREN

Purpose: To identify and develop techniques and instruments useful in preschool diagnosis which lead to productive curriculum practices.
Subjects: Five-year old children without observable physical defects, I.Q.'s between 50 and 85, who fitted the criteria for psychosocial deprivation.
Methods: Curriculum designed and refined during first year of study is applied to three experimental groups for one academic year in each of three successive years. Criterion variables of achievement and adjustment for experimental groups are compared with those of three control groups as they complete successive years of regular school attendance.
Duration: September 1964-July 1969.
Investigator(s): Boyd R. McCandless, Ph.D., Professor of Education and Psychology; Walter L. Hodges, Ph.D., Assistant Professor of Educational

Psychology; and Howard H. Spicker, Ph.D., Assistant Professor of Special Education, Indiana University, Bloomington, Ind. (Reported by Joseph D'Ambrosio, Research Coordinator, University Schools Clinic Complex, Indiana University.)

20-QJ-6 "SUCCEED" PROJECT

Purpose: To study how schools might innovate programs in individualized education, especially in relation to needs of disadvantaged students.
Subjects: Faculties and students in a junior and a senior high school in each of four metropolitan Pittsburgh school districts outside the central city.
Methods: Cadre selected from school personnel and trained in Summer Workshop to be change agents; assessment of efforts to effect planned change in "natural state" school settings.
Duration: April 1965-1968.
Investigator(s): Raymond Hummel, Ph.D., Associate Professor, University of Pittsburgh, and Director, Project SUCCEED, 400 S. Craig St., Pittsburgh, Pa. 15213.
Cooperating group(s): Buhl Foundation, Pittsburgh.

20-QJ-7 INSTRUCTION OF SOCIO-ECONOMICALLY HANDICAPPED PRESCHOOL CHILDREN IN THE USE OF LANGUAGE TO INCREASE ACADEMIC APTITUDE

Purpose: To determine principles of language instruction which will increase the ability of socio-economically handicapped children to use language; to test hypothesis that special instruction in use of language with such children will result in improved language ability and more rapid academic progress during the first year of school; and to discover best ways of developing and using programmed instruction with language-handicapped young children.
Subjects: Children three to five years of age from various day care centers in Los Angeles County. For the final study there will be 200 experimental and 200 control children from this population.
Methods: Two groups of culturally-deprived children will be instructed in a different way; appropriate control groups of socio-economically handicapped and middle class children will also be used. Measures to be used as criteria for major experiment will include ability to understand instructions, questions, and information presented orally; ability to speak sentences (to describe situations presented visually) involving different linguistic forms and vocabulary; and ability to use language effectively in logical thinking (i.e., to use language to cue oneself appropriately in both overt and covert fashion). The most important criteria will include academic progress during the first grade.
Findings: A preliminary study has indicated a significant difference between low socio-economic and middle economic status children in auditory discrimination.
Duration: June 1965-June 1970.
Investigator(s): Evan R. Keislar, Ph.D., Professor of Education, and Carolyn Stern, Ed.D., Assistant Research Educationist, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, Calif. 90024.
Cooperating group(s): Los Angeles City Child Care Centers; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Articles and papers to be prepared.

20-QJ-8 THE PREPARATION OF TEACHERS FOR SCHOOLS IN CULTURALLY DEPRIVED NEIGHBORHOODS (THE BRIDGE PROJECT)

Purpose: To improve the preparation of teachers for working with children in schools in slum-ghetto areas.

Subjects: Three teachers working with approximately 85 children for the three years of junior high school.

Methods: A small school-within-a-school was created within which three classes of children were taught English, science, math, and social studies by the same teachers for three years. Progress was measured by pre- and post-administrations of the Wechsler Individual Scale for Children (WISC) and annual administration of the Metropolitan Achievement Test.

Findings: Project boys gained 6.25 points in Verbal I.Q. while control boys gained only 0.28 points, a statistically significant difference. Project boys gained 5.32 points in Full Scale I.Q. as compared to 1.78 points for control boys.

Duration: February 1961-July 1965.

Investigator(s): Robert W. Edgar, Ed.D., and Helen Storen, Ed.D., Professors of Education, Queens College, Flushing 67; and Albert J. Harris, Ph.D., Professor, Division of Teacher Education, City University of New York, 535 E. 80th St., New York, N. Y. 10021.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publication: Full report and summary available upon request.

20-QJ-9 SENSORY-PERCEPTUAL LANGUAGE TRAINING TO PREVENT SCHOOL LEARNING DISABILITIES IN CULTURALLY DEPRIVED PRESCHOOL CHILDREN

Purpose: To prevent learning problems in school, failure to achieve, and subsequent school dropouts through counteracting inhibiting effects of cultural deprivation on language and perceptual learning during preschool years.

Subjects: 40 children, ages three, four, and five, enrolled in a day care center in a neighborhood characterized by extremely low socio-economic status. Approximately the same number of children serving as a control group are enrolled in a day care center in another area of the city, also a socio-economically depressed area.

Methods: Professionally trained personnel in area of speech and language pathology are conducting daily preschool instruction programs for preschool children in the three subgroups, three to five years. Emphasis is on methods that have been found successful with children whose physical or sensory disabilities have precluded normal acquisition of language. Curriculum and methods are being developed and adapted to formulate a maximally effective program to achieve the objectives. Curriculum emphasis includes adaptation of Montessori methodology, sensory-perceptual training, utilization and adaptation of early reading experiences using the ITA system, and intensive stimulation of language development.

Duration: June 1965-May 1968.

Investigator(s): Freeman McConnell, Ph.D., Director, and Kathryn Horton, M.S., Instructor in Speech Pathology, The Bill Wilkerson Hearing and Speech Center, Vanderbilt University, Nashville, Tenn.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-10 INTELLECTUAL STIMULATION OF CULTURALLY DEPRIVED INFANTS DURING THE PERIOD OF EARLY VERBAL DEVELOPMENT--FIFTEEN MONTHS TO THREE YEARS

Purpose: To attempt to raise level of intellectual performance of culturally deprived infants through a program of intellectual stimulation in the home, from infant's age of 15 to 36 months; to study correlates of intellectual growth and sequence of intellectual growth during this period.
Subjects: 30 infants and an untutored control group.
Methods: Flexible, informal tutoring in the home for an hour a day, five days a week; evaluation before 15 months and at 21, 27, and 36 months to determine if, when, and in what specific abilities differences emerge between tutored and untutored children.
Duration: 1965-1968.
Investigator(s): Earl S. Schaefer, Ph.D., Senior Scientist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md.

20-QJ-11 IMPACT ON LEARNING AND RETENTION OF SPECIALLY DEVELOPED HISTORY MATERIALS FOR CULTURALLY DEPRIVED CHILDREN

Purpose: To determine whether or not culturally disadvantaged youth in eighth grade will learn more, retain learning longer, and be more interested in their study of the Civil War period when material on the Negro is included in their studies in two forms--text-like materials, or fiction and biography, than when customary text is basis of study material.
Methods: Cooperative development of a teaching unit on Civil War period, with testing instrument based on concepts agreed to be fundamental to study of period; testing to consist of pre-test, post-test, and follow-up-test four months after conclusion of study; during and after study of unit, classroom observations, questionnaires, and interviews to determine responsiveness of pupils to Negro materials.
Duration: 1964-1965.
Investigator(s): Robert W. Edgar, Ed.D., Professor, and Carl Auria, Ed.D., Assistant Professor, Department of Education, Queens College, City University of New York, Flushing, N. Y. 11367.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-12 EFFECTS OF AN ENRICHMENT PROGRAM ON SIX-YEAR OLD CHILDREN

Purpose: To evaluate effects of an enrichment program on six-year old children; to gauge effects on I.Q., achievement, and language, with particular reference to pattern, fluency, and vocabulary.
Subjects: 90 children from a participating school in the Philadelphia Educational Improvement Program, and a control group matched on achievement.
Methods: Pre- and post-test measures include Kuhlmann-Anderson Intelligence Tests, Metropolitan Achievement Tests, and two Philadelphia Achievement Tests. A two by three analysis of covariance is performed on each post-test measure using its corresponding pretest as a control. A situational language test is administered to both groups at end of one school year and analyzed by a two by three analysis of variance.
Duration: Not reported-January 1967.
Investigator(s): Marciene S. Mattleman, Department of Elementary Education, Temple University, Philadelphia, Pa. 19122.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-13 AN AUTOMATED PRIMARY GRADE READING AND ARITHMETIC CURRICULUM FOR CULTURALLY DEPRIVED CHILDREN

Purpose: To identify obstacles to acquiring basic skills of reading and arithmetic in primary grades, particularly by culturally deprived children, and to devise behavioral methods for overcoming these obstacles.
Methods: Sequential organization of written materials and preparation of auditory materials to accompany it; use of appropriate instruments for presenting curriculum materials both auditorily and visually, and thereupon recording students' responses and response times.
Investigator(s): Richard C. Atkinson, Ph.D., Associate Professor of Psychology and Education, and Patrick Suppes, Ph.D., Professor of Philosophy and Statistics, Stanford University, Stanford, Calif.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-14 RAISING EDUCATIONAL ASPIRATIONS OF THE CULTURALLY HANDICAPPED

Purpose: To test hypothesis that cognitive, social, and verbal readiness of preschool, non-urban children and their parents' aspirations for their children's education will be increased by an intensive program of home teaching and guidance.
Subjects: 30 children from families earning less than $3,000 a year, known to welfare agencies and residing in non-urban areas near Plattsburgh.
Methods: Subjects are assigned to three groups, each of which receives treatment and attention, attention only, or no attention and no treatment. Stanford-Binet I.Q. Test, Vineland Social Maturity Scale, Illinois Test of Psycholinguistic Abilities, Columbia Test of Mental Maturity, and Plattsburgh Arithmetic Readiness Inventory are used to measure dependent variables. Parents' aspirations for their children's education are assessed by content analysis of recordings of home teacher's interviews with each parent.
Duration: November 1964-December 1965.
Investigator(s): Anthony N. Schwartz, Campus School Principal, State University College, Plattsburgh, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-15 A PRESCHOOL PROGRAM FOR SPANISH-SPEAKING CHILDREN

Subjects: Spanish-name children from low income families living on West Side of San Antonio, Texas.
Methods: Subjects, accepted at age three, continue in preschool for three years. Mothers also participate by attendance with children, observation of activities, and group discussion. Follow-up evaluation of experimental and control group is done in cooperation with public schools in order to determine effect of program on adjustment of child in first year of school. Emphasis is placed on language facility in both Spanish and English, as well as upon factors of cultural difference, and on provision of experiences geared to enriching child's life and preparing him for adaptation to demands of dominant culture.
Duration: June 1965-May 1970.
Investigator(s): Constance N. Swander, M.S.W., A.C.S.W., Executive Director, and Gladys R. Blankenship, B.A., Good Samaritan Center, 1600 Saltillo St., San Antonio, Tex. 78207.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-QJ-16 STUDY OF THE EFFECT OF SELF-DIRECTIVE DRAMATIZATION ON PROGRESS IN READING ACHIEVEMENT AND SELF-CONCEPT OF CULTURALLY DISADVANTAGED ELEMENTARY SCHOOL CHILDREN

Purpose: To determine (1) if, through use of self-directive dramatization, significant gains can be effected in reading achievement and in improvement in self-concept of groups of culturally disadvantaged school children, and (2) if gains in reading achievement and improvement in self-concept are related.
Subjects: Culturally disadvantaged Negro children from low income homes, divided into four or more classes of 30 children each, in Forest Park Elementary School, Joliet, Ill.
Methods: Pupils will read from wide selection of materials, select stories to read in small groups, read, and dramatize them. Before and after each phase of study, a reading test will be administered to each child and each pupil will be checked on a question sheet containing descriptions of behavior manifestations indicative of positive or negative self-concept. Significance of reading gain and self-concept changes will be determined. Matches for each pupil selected from other classes will receive reading instruction chiefly through use of a basal reader, and mainly in formal whole-class or small group sessions. Significance of difference in gain in reading achievement made by pupils in experimental classes and by those in other classes who are paired with them will be determined.
Duration: September 1964-continuing.
Investigator(s): Robert H. Moore, Ph.D., Professor of Education, and Lessie Carlton, Ed.D., Associate Professor of Education, Illinois State University, Normal, Ill. 61761.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QJ-17 COMPARING READING APPROACHES IN FIRST GRADE TEACHING WITH DISADVANTAGED CHILDREN (THE CRAFT PROJECT)

Purpose: To compare two main approaches and four specific methods of teaching reading to discover their effectiveness with disadvantaged urban Negro children.
Subjects: 1,378 children chosen from 12 elementary schools with a high percentage of Negro children, a minimum of six first grade classes, with evidence of cultural deprivation and marked retardation in previous surveys of reading ability. 1,146 children remained to conclusion of first grade testing.
Methods: Random assignment of four methods to schools, two methods to each school; random assignment of teachers to two methods within school; and random assignment of pupils within each school to two methods. Children with and without kindergarten experience were balanced in assignment to methods. Four treatment methods were: (1) skills-centered method using basal readers, with close adherence to instructions in teacher's manuals; (2) skills-centered method utilizing basal readers, but substituting Phonovisual method of teaching word-attack skills for word-attack lessons accompanying basal reader; (3) language-experience method, in which the beginning reading materials were developed from oral language of the children; and (4) language-experience method with heavy supplementation of audio-visual procedures. Pre- and post-tests were administered.
Findings: Most disadvantaged first grade Negro children can respond to superior teaching with good learning and can learn to read by same methods that work with middle class white children.
Duration: June 1964-March 1966.
Investigator(s): Albert J. Harris, Ph.D., Professor, and Blanche L. Serwer, Lecturer, Division of Teacher Education, City University of New

York, 535 E. 80th St., New York, N. Y. 10021.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Article in Reading and Inquiry, J. Allen Figurel (Ed.), International Reading Association Conference Proceedings, Vol. 10, 1965. Newark, Delaware: International Reading Association; also mimeographed reports.

20-QJ-18 CONTINUATION OF THE CRAFT PROJECT

Purpose: To discover whether the relative effectiveness of the four methods of reading instruction utilized in the CRAFT Project changes as original first grade pupils progress into second and third grades.
Subjects: Thirty-eight classes in the CRAFT Project.
Methods: Thirty-eight classes in the CRAFT Project will continue for a second year to receive instruction based on their first year reading instruction. Second grade teachers will be given assistance by district reading coordinator and will take part in a training workshop. A uniform test battery will be administered near the end of second year. Minimal number of observations by research assistants will be scheduled to check objectively the internal validity of the methodological variables. The four teaching methods will be compared using statistical procedures similar to those used in CRAFT. There will be no attempt to control teaching procedures in third grade. Children who move to other schools will be traced, and scores on city-wide reading tests will be sought for all children who participated in first and second grades.
Duration: 1965-January 1968.
Investigator(s): Albert J. Harris, Ph.D., Professor; Blanche L. Serwer, Lecturer; and Kenneth Brelesky, Research Assistant, Division of Teacher Education, City University of New York, 535 E. 80th St., New York, N. Y. 10021.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report planned for January 1968.

20-QM-1 ELEMENTARY SUMMER SCHOOLING OF MIGRANT CHILDREN

Purpose: To analyze educational process in special summer school program for children of migrant agricultural laborers in New Jersey; to determine whether success of academic program depends upon effectiveness of acculturation process and whether social structure of migrant families impedes academic achievement and learning of values, goals, and patterns of conduct necessary for participation in modern community life.
Subjects: Students in the New Jersey summer schools for children of migratory agricultural workers during summers of 1962 and 1963, and their mothers.
Methods: The school program consisted of two elements: a program of standard academic studies and a program of nonacademic skills and knowledge felt to be essential to participation in modern community life. Evaluation was based on information derived from systematic interviews with state and local educators, migrant children and their parents, and teachers. Achievement tests were administered to children. Observers, participating to a limited extent in classroom activities, compiled data regarding educational processes and subcultural patterns and problems of migrant children and their families.
Findings: Findings are reported in the monograph, "Elementary Summer

Schooling of Migrant Children", 1964 in Chapters 4 to 10. The final chapter, Chapter 11, recommends a program.
Duration: January 1962-August 1964.
Investigator(s): Simon Marcson, Ph.D., Associate Professor, and Frank A. Fasick, Ph.D., Assistant Professor, Department of Sociology, Rutgers University, New Brunswick, N. J. 08903.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education.

20-QM-2 EDUCATIONAL PROGRAMMING FOR PUPILS WITH NEUROLOGICALLY BASED LANGUAGE DISORDERS

Purpose: To test the relative efficacy of teaching children with specific language disorders attributable to medically diagnosed neurological impairment in regular, heterogeneously grouped classroom activities, supplemented by individual language therapy, or in special, homogeneously grouped classes; to investigate whether such pupils make significantly greater gain in mental function and/or academic achievement when they are on medically prescribed anticonvulsive medication than when they are not.
Subjects: 100 children with neurologically based language disorders, matched for sex, age, WISC scores, and scholastic achievement, divided into two groups.
Methods: One group receives individualized language therapy in regular classrooms; the other group is enrolled in homogeneously grouped special education classes. Half of the subjects in each group receive anticonvulsive medication as prescribed by physician. Scholastic achievement is to be tested before and two years after the program.
Duration: July 1964-December 1967.
Investigator(s): Empress Y. Zedler, Ph.D., Professor of Education and Director, Speech, Hearing, and Language Clinic; J. Lloyd Rogers, Ph.D., Chairman, Department of Education; and Olga Dominguez, M.A., Clinical Supervisor, Southwest Texas State College, San Marcos, Tex.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-QM-3 AN INVESTIGATION OF THE EFFECT OF PRESENTING A SEX EDUCATION COURSE TO HIGH SCHOOL STUDENTS WHO HAVE BEEN REMOVED FROM THE REGULAR CLASSROOM SITUATION BECAUSE OF SEVERE EMOTIONAL AND PHYSICAL PROBLEMS

Purpose: To discover whether a course in sex education presented to emotionally disturbed and physically disabled adolescents will increase their knowledge and understanding about sex and reduce their level of manifest anxiety.
Subjects: High school students in eleventh and twelfth grades who are on Home Instruction with New York City Board of Education.
Methods: Pretest, post-test studies after presenting a 12-week sex education course. Use of lecture-discussion method with audio-visual aids as lead-in to discussion.
Duration: February 1966-June 1967.
Investigator(s): Jean L. Bloom, M.Ed. (Ph.D. Candidate, New York University), Coordinator of School Programs, Federation of the Handicapped, 154 W. 14th St., New York, N. Y. 10011.
Publication: On file as a doctoral dissertation at New York University; possible article for Exceptional Children.

20-QM-4 METHODS OF TEACHING BRAILLE READING

Purpose: To determine and describe methods used in teaching Braille reading to blind children; to test which methods produce better Braille readers; to determine reading rate and comprehension of Braille readers and compare with norms for visual readers; to determine specific reading characteristics of good Braille readers; to determine the relation of certain individual characteristics of blind children, such as age at onset of blindness, visual residue, etc., with achievement in Braille reading.
Subjects: 50 fourth graders in residential schools, 50 fourth graders in public school facilities for blind children; 50 eighth graders in residential schools, and 50 eighth graders in public school facilities for blind children, in U.S.A.
Methods: Questionnaires and reading tests, and a workshop of practitioners in teaching Braille reading.
Duration: September 1964-February 1967.
Investigator(s): Berthold Lowenfeld, Ph.D., Research Professor, Frederic Burk Foundation for Education, San Francisco State College, 1600 Holloway Ave., San Francisco, Calif. 94132.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Publication of a book is planned.

20-QM-5 HARRIS COUNTY, TEXAS MOBILITY AND ORIENTATION INSTRUCTION FOR BLIND CHILDREN AND ADULTS

Purpose: To demonstrate validity and value of systematic teaching of orientation and mobility to blind children and adults to enable them to travel freely and independently.
Subjects: Blind children and adults of Harris County, Texas.
Methods: Trainees will be given physical and psychological examinations to determine ability to take training; preinstruction evaluations will be made of mode, independence, frequency, and effectiveness of travel. Intensive three-month training period, three to five hours a week, using basic techniques and touch, or Hoover, techniques with the cane. Pre-cane skills will be taught at elementary school level. Follow-up evaluations will be made at six months, one, two, and three years after training.
Investigator(s): James E. Kean, Director, Children's Center and Clinical Services; Jeanna Fultz, Mobility Instructor; Diane Cassady, Psychologist; Frank D. Hill, III, M.D., Pediatric Consultant; and Mary C. Fletcher, M.D., Pediatric Ophthalmologist Consultant, Houston-Harris County Lighthouse for the Blind, 3530 W. Dallas, P. O. Box 13435, Houston, Tex. 77019.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Report to be published.

20-QM-6 CORRECTION OF FUNCTIONAL MISARTICULATION UNDER AUTOMATED SELF-CORRECTION SYSTEM

Purpose: To develop, apply, and evaluate a system of programmed instruction for rehabilitation of functional misarticulation of children in the elementary school, with application being made through a completely automated system--the Automated Speech Correction Program.
Subjects: 100 children in Las Cruces, New Mexico public schools, ages 7 years 9 months to 12 years, who exhibited functional misarticulation, but were normal in intelligence, hearing, and emotional adjustment.

Methods: The programmed instruction met the criteria established for intrinsic programming, employing approximations leading to specified terminal behavior. Basic phonetic materials were generated by an IBM 1620 digital computer with the generating matrix programmed for probability of misarticulation, similarity of acoustical impression, degree of perceptual confusion, similarity of articulatory pattern, and frequency of use. A randomized complete block design was used, with five different elementary schools being the blocks and 20 children at each school being the subjects. Data were derived from the Templin Short Test of Sound Discrimination, the Templin-Darley Short Form Articulation Test, and specially developed test of auditory discrimination and articulation.
Findings: The ASCP produced changes in auditory discrimination of subjects at a P greater than .001, and in articulation pattern of subjects at P levels greater than .05 and .001, depending upon combination of treatment.
Duration: September 1964-August 1965.
Investigator(s): Edgar R. Garrett, Ph.D., Professor of Speech; Robert Sabin, B.S., Consultant; and Merrell E. Thompson, Ph.D., Department of Psychology, New Mexico State University, P.O. Box Y, University Park, New Mex.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at National Convention of American Speech and Hearing Association, Chicago, Ill., November 1965; American Speech and Hearing Association: VII: 422, 1965; other publications planned.

20-QM-7 EVALUATION OF SENSORY-MOTOR ARTICULATION THERAPY

Purpose: To continue investigation of relative effectiveness of sensory-motor articulation therapy, controlling for effect of therapist's personality, on reduction of articulatory errors in third to sixth grade children.
Methods: In 1965-66 phase, three groups of children were given a Deep Test of Articulation at beginning and end of school year. One group was treated by sensory-motor methods in which 15 therapists received six weeks of training; second group was treated by additional methods in which 14 therapists had a one-week refresher course; and third group received no therapy. Data will be analyzed to determine if sensory-motor method of articulation therapy produced greater improvement in articulatory skills than maturation or traditional method of articulation therapy. In 1966-67 phase, traditional therapists of initial phase will, after intensive training in sensory-motor procedures, employ these methods with another group of children. Improvement in children's articulatory skills attained by therapists when using traditional procedures will be compared with improvement made by children when same therapists follow sensory-motor procedures.
Duration: 1965-1967.
Investigator(s): Eugene T. McDonald, Ed.D., Research Professor of Speech Pathology, and Lester F. Aungst, M.S., Research Assistant, Department of Special Education, Pennsylvania State University, University Park, Pa.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-QN-1 AN EVALUATION OF THE YOUTH AND WORK TRAINING PROGRAMS OF THE NEW YORK STATE DIVISION FOR YOUTH

Purpose: To evaluate relative effectiveness of the Youth and Work Training Programs utilizing an experimental-control design; specifically, (1) to identify the pertinent characteristics of the study population, including attitudes that might be relevant to the understanding of the problems related to the dropouts' educational and vocational adjustment; (2) to establish criteria to evaluate the effectiveness of specific types of program intervention on experimentals as compared to controls; (3) to establish a classification of the study population, and if indicated, to describe type of program intervention found most effective in relation to this classification or typology.
Subjects: School dropouts who had evidenced a lack of positive work attitudes and basic skills necessary to secure employment and who took part in Youth and Work Training Programs of the New York State Division for Youth.
Methods: Follow-up interviews, data collection from case records, and staff opinion survey.
Duration: 1963-1968.
Investigator(s): Roslyn G. McDonald, Deputy Director, Research and Planning, and Irwin J. Goldman, New York State Division for Youth, 270 Broadway, New York 7, N. Y. (Reported in the section "Current Projects" of the *International Bibliography on Crime and Delinquency*, May 1966.)
Cooperating group(s): Youth Research, Inc.; Ford Foundation.

SOCIAL SERVICES

20-RA-1 SURVEY OF ACTION AREA RESIDENTS: BALTIMORE, MARYLAND

Purpose: To test a series of assumptions about characteristics and problems of an anti-poverty program target population frequently cited in connection with meeting the needs of impoverished youth and adults, and to involve the potential beneficiaries in a realistic way in planning an urban anti-poverty program.
Subjects: 250 youths 14 to 19 years of age, and 250 adult heads of households residing in anti-poverty target area. Within study area, a sampling frame was developed based on degree of overcrowding, in order to preclude inadvertent inclusion of large numbers of those not considered likely potential beneficiaries of services to be offered; sampling points were randomly chosen; and block quotas were established based on number of occupied dwelling units.
Methods: Intensive home interviews were conducted, utilizing separate interview schedules for youth and for adults based on different series of assumptions pertaining to experiences with health, welfare and recreation services, perceptions of neighborhood problems, preferences regarding solutions, and attitudes.
Findings: Widespread dissatisfaction with conditions in their neighborhoods and with amount and quality of city services was expressed by both youth and adults. There was also a general lack of awareness of certain kinds of services, especially the less tangible ones, and many known services were felt to be inaccessible. Unlike adults, youth did appear to be conscious of importance of education and jobs, and were generally more optimistic than their elders. One major limitation on the effectiveness of programs for this group may well be the deficiencies in family life uncovered by the survey. However, there is evidence that these residents are not as mobile and transient as often supposed, increasing chances of success for both neighborhood-based and long-term programs that may be needed to deal with their problems.
Duration: August 1964-August 1965.
Investigator(s): Daniel R. Fascione, M.A., Director of Research, Health and Welfare Council of the Baltimore Area, Inc., 10 South St., Baltimore, Md. 21202.
Publication: *Survey of Action Area Residents: Baltimore, Maryland*, Health and Welfare Council of the Baltimore Area, Inc. - 64 pages.

20-RA-2 NEW ORLEANS JEWISH ADOLESCENT STUDY

Purpose: To determine attitudes and opinions of Jewish youth in grades 10 through 12 in New Orleans as a means of evaluating services presently offered, and to determine if other services are needed.
Subjects: Total population of Jewish children in grades 7 through 11 as of May 1965, and 107 Jewish boys and girls, comprising one-third of total in grades 10, 11, and 12 in June 1965.
Methods: Demographic study by means of telephone interviews conducted by volunteers; in-person interviews with sample of 107 conducted by paid interviewers.
Findings: Demographic data: group is primarily middle class, doing well

academically; 89 percent live with both parents and 92 percent have at least one sibling; almost one-third go to private schools; frequency of performing chores at home declines as age goes up; more than half belong to some school or nonschool social organization.
Duration: September 1963-January 1967.
Investigator(s): Viola W. Weiss, M.S.S.A., Director of Planning and Education, and John C. Rosen, M.A., Director, Jewish Children's Home Service, 1636 Toledano No. 305, New Orleans, La. 70115.
Cooperating group(s): New Orleans Jewish Federation.
Publication: Report on Phase I (demographic) available from Jewish Federation of New Orleans, 211 Camp St. Publication of Phase II not yet determined.

20-RD-1 SOCIAL GROUP WORK WITH THE CULTURALLY DEPRIVED

Purpose: To enable educationally disadvantaged girls to improve their academic and social performance in school.
Subjects: Second and third grade girls referred by school personnel as not achieving satisfactorily in academic work and having difficulty in relationships with peers and adults.
Methods: Social group work treatment with participation of parents in various ways; project to be carried on in schools and then eventually integrated into ongoing program of Camp Fire Girls; results to be evaluated at various stages of program.
Duration: September 1963-August 1967.
Investigator(s): Tetsu Sugi, M.S.W., Camp Fire Girls, Los Angeles Area Council, 304 S. Kingsley Dr.; and Edith Miller Tufts, Ph.D., Research Director, and Professor, School of Social Work, University of Southern California, Los Angeles, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-RD-2 PROJECT MIAMI: MOTIVATION INVOLVEMENT ATTACKS MASSIVE ISOLATION

Purpose: To modify observable behavior patterns of girls with maximum possibilities of delinquency and dropout problems with aim of picking up educational lags, enriching cultural and living experiences, providing support for personal and environmental problems, helping to establish realistic social values, and upgrading future aspirations.
Subjects: 50 girls, ages 13 to 16 who, according to school, police departments, courts, and other agencies, show poor educational, personal, and social adjustment.
Methods: Group work and a leadership training program.
Duration: July 1965-June 1966.
Investigator(s): Susan Love, A.C.S.W., Executive Director, Young Women's Christian Association of Miami (Dade County), 114 S.E. 4th St.; Richard S. Sterne, Ph.D., Research Director, Welfare Planning Council, 395 N.W. 1st St., Miami, Fla. 33136; and Mary L. Baker, Counselor, Shawnee High School, Louisville, Ky.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, U. S. Department of Health, Education, and Welfare.

20-RJ-1 EXTRAFAMILIAL ADOPTIONS

Purpose: To improve all phases of adoption procedures touching the lives of adopted children; to study specific emotional problems of children adopted outside of their own families.
Methods: Clinical investigation.
Investigator(s): Ralph I. Fried, M.D., Chairman, Committee on Adoptions, American Academy of Pediatrics, 1801 Hinman Ave., Evanston, Ill.

20-RJ-2 THE JEWISH FAMILY AND CHILDREN'S SERVICE ADOPTION STUDY

Purpose: To analyze characteristics, experiences, and attitudes of successful and unsuccessful applicants for a sectarian adoption service, in order to identify ways of strengthening the administration of the service and the prospective adoptive parents' understanding of the adoption process. Study was designed to complement an administrative evaluation of the adoption service that had recently been undertaken.
Subjects: From an analysis of agency records covering 164 applicants, three sub-samples were developed which yielded 16 interviews with successful applicants and 18 interviews with applicants who did not receive a placement from the agency.
Methods: First phase involved systematic analysis of agency case records on recent applicants for an adoptive child, in order to determine outcome of each case and characteristics of applicant couples. Second phase consisted of intensive home interviews of adoptive applicants, half of which were joint interviews with both husband and wife and half with wife alone.
Findings: The interviews reflected the complexities of an adoption service and underscored the difficulties of effectively administering one of such small scope. Applicant attitudes and expressions of satisfaction and dissatisfaction with adoption process were evaluated, and specific areas were identified for agency consideration of policy or administrative changes.
Duration: January 1964-September 1965.
Investigator(s): Daniel R. Fascione, M.A., Director of Research, Health and Welfare Council of the Baltimore Area, Inc., 10 South St., Baltimore, Md. 21202.
Cooperating group(s): The Jewish Family and Children's Service, Baltimore, Md. 21215.
Publication: Information available on request to: Mr. Milton Goldman, Executive Director, The Jewish Family and Children's Service, 5750 Park Heights Ave., Baltimore, Md. 21215.

20-RJ-3 PREDICTABILITY IN ADOPTION

Purpose: To identify salient characteristics of children needing adoptive parents as well as couples wanting to adopt them, and to relate these characteristics to various aspects of later functioning that are indicative of successful placements.
Subjects: About 200 adopted and 100 natural children of the Caucasian race whose parents volunteered to participate in the study.
Methods: A wide variety of information, including developmental assessment scales, parental attitude inventories, and ratings based on interviews with fathers and mothers, is being collected for the adopted children before placement as well as at 2, 4, 7, 10, and 13 years of age. More extensive observations of the children's behavior are planned when they are of school

age. Similar data are being gathered for natural children.
Duration: July 1962-July 1976.
Investigator(s): Byron W. Lindholm, Ph.D., Director, Delaware Family Study, Children's Bureau of Delaware, Inc., 1310 Delaware Ave., Wilmington, Del.
Cooperating group(s): Christiana Foundation, Wilmington; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Findings will be published as they become available.

20-RJ-4 FOLLOW-UP STUDY OF CROSS-RACIAL ADOPTIONS

Purpose: To study adjustment of non-Caucasian children placed in adoptive homes with Caucasian parents.
Subjects: 15 children, five to 10 years old, who had been adopted when less than one year old.
Methods: Interviews with both parents, taken separately but on same schedule of approximately 150 questions; interviews with two neighbors of the parents and with teachers of subject child; structured observation of family in home for seven-hour period; psychological tests.
Findings: Adoptive families of minority children are much like adoptive families of white children in age, education, and economic status. In general, parents like children and had their own both before and after adoption of the minority child and other children which they adopted. Children generally are average students according to grades and teacher ratings, and have no marked behavior problems, as indicated by psychological tests and reported behavior. None of neighbors identify problems connected with race.
Duration: 1964-1967.
Investigator(s): Laurence K. Northwood, Ph.D., Associate Professor of Social Work, University of Washington; and Patricia Denny, Caseworker, Catholic Children's Services of Seattle, Seattle, Wash.
Cooperating group(s): The Menninger Foundation, Topeka, Kans.

20-RM-1 USE OF FOSTER FAMILY HOMES IN SOCIAL INTERVENTION

Purpose: To test hypothesis that foster family care is a useful intervention technique in the culture of poverty, and that placement in foster family care changes career and educational goals of educationally and culturally deprived young people.
Subjects: 26 Negro students from Prince Edward County, Virginia, who were in foster family care for one to two years from 1961 to 1963 while their schools were closed defying desegregation.
Methods: Research interviews with former foster parents, students who were in foster care, and natural parents of students.
Findings: Students were well integrated young people who adjusted easily to foster care and new school situations. There was no evidence that they were harmed by foster family placements. They felt that they benefited by the enriched school program and more diversified experiences. They were quickly reassimilated into their families who appeared to be the important influence on their life goals.
Duration: June 1964-June 1967.
Investigator(s): Frances P. Simsarian, D.S.W., Associate Professor, School of Social Work, Howard University, Washington, D. C.
Cooperating group(s): Washington School of Psychiatry; National Institute of Mental Health, Public Health Service, U. S. Department of Health,

Education, and Welfare.
Publication: Part of the study is forthcoming in Social Work.

20-RM-2 EMPIRICAL ASSESSMENT OF CHARACTERISTICS OF CHILDREN IN FOSTER PLACEMENT

Purpose: To study the behavioral characteristics of children in foster care and relationships existing between factors in the child's life experience and his characteristic behavior patterns.
Subjects: 69 children in foster care, approximately age 12.
Methods: Survey of case records of worker judgment regarding the characteristics of children conducted in accordance with a research schedule designed to assess over 48 behavioral characteristics.
Duration: 1965-1967.
Investigator(s): Edmund V. Mech, Ph.D., Professor, School of Social Service, Arizona State University, Tempe, Ariz.; Harriet Goldstein, M.S.W., Foster Care Supervisor; and Joseph L. Taylor, M.S.W., Executive Director, Association for Jewish Children, 1301 Spencer St., Philadelphia, Pa.
Cooperating group(s): Philadelphia Foundation.
Publication: Monograph or article in Child Welfare.

20-RM-3 PSYCHIATRIC CARE THROUGH SPECIAL FOSTER HOMES

Purpose: To train foster parents to care for emotionally disturbed children; to offer brief residential care to children to prepare them for foster homes.
Subjects: Emotionally disturbed children between the ages of 6 and 16 admitted to Merrifield, a residential treatment center.
Methods: Group meetings are held with foster parents, foster parents are seen for case work treatment, and children receive individual psychotherapy. Focus is on developing selection criteria for, and examining the process of, training foster parents in care of emotionally disturbed children. Project combines use of Merrifield house as a residential facility with use of special foster homes. Goal is to restore children to their own homes. Project also deals with problem of developing criteria to determine when a child can be helped by being separated from his family.
Duration: October 1962-not reported.
Investigator(s): Albert Krinsky, M.D.; Lisa Pollack Rablen, M.D.; and Bernard Rosenblatt, Ph.D., Merrifield Center, 158 Holden St., Worcester, Mass. (Reported by Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604.)
Cooperating group(s): Worcester Children's Friend Society; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-RV-1 A STUDY OF COUNSELING WITH FAMILIES OF "DISADVANTAGED" YOUTH

Purpose: To determine the differences between value systems of essentially "middle class" counselors and of families in an urban poverty pocket.
Subjects: Families of a low income, urban redevelopment area.
Methods: Teams of two, one male and one female counselor, have continuous supervision for long-range family counseling. Counselors are first and second year graduate students.
Findings: Values are extremely disparate. More "flexible," open and

accepting counselors are more able to communicate and be accepted as helpful by families.
Duration: September 1964-not reported.
Investigator(s): Billie C. Beatty, Ph.D., Associate Professor of Counseling, San Francisco State College, 1600 Holloway, San Francisco, Calif. 94132.
Cooperating group(s): Booker T. Washington Community Center.

20-RV-2 ORGANIZATION AND UTILIZATION OF PUBLIC ASSISTANCE PERSONNEL

Purpose: To study relationships of maternal and child health services to public welfare programs; specifically, to determine ways that Aid to Families with Dependent Children Program can facilitate delivery of maternal and child health services.
Subjects: Families receiving public assistance, including 300 families receiving AFDC in Cook County, Ill.
Methods: Data will be analyzed on such topics as mothers' physical and mental health, behavior problems of children, child care practices, and nutritional factors. Data will also be analyzed with respect to each child -- his birth (legitimacy) status, relationship to head of Aid to Dependent Families and Children family, major physical disabilities, and present health problems. Data will then be related first to history of help sought for health problems, medical service received, and remaining unmet needs for medical and health services. An attempt will then be made to determine relationship of receipt or failure to receive needed medical service to nature and volume of services (chiefly referrals) provided by public assistance agency under study.
Duration: April-September 1966.
Investigator(s): Edward E. Schwartz, Ph.D., George Herbert Jones Professor; William C. Sample, M.A., Assistant Professor; and Claire Anderson, M.A., Research Associate, School of Social Service Administration, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-RX-1 USE OF TRAINED LOCAL YOUTH AS COMMUNITY MENTAL HEALTH AIDES

Purpose: To test a new approach to the prevention and treatment of mental health problems of youth from disadvantaged backgrounds through utilization of trained local youth from similar backgrounds.
Subjects: 180 girls and boys, ages 11 to 16, from the Second Police Precinct, Washington, D. C.
Methods: Nine trained local youth serve as group leaders for two groups of children each, 10 in each group. A variety of therapeutic activities and discussions of the childrens' problems are carried out. Youth leaders are under direct supervision of a professional staff of psychologists, social workers, and psychiatrists.
Duration: September 1965-August 1969.
Investigator(s): Lonnie E. Mitchell, Ph.D., Director, Baker's Dozen Community Mental Health Center for Adolescents, 1511 4th St., N. W., Washington, D. C.
Cooperating group(s): Howard University; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Manual, Training for Community Mental Health Aides, Leaders for Child and Adolescent Therapeutic Activity Groups, Institute for Youth Studies, Howard University, Washington, D. C.

20-RZ-1 IDENTIFICATION AND DESCRIPTION OF EDUCATIONAL TECHNIQUES SUITABLE FOR PARENTS OF LOWER CLASS FAMILIES

Purpose: To develop educational techniques which would prove effective in training lower class mothers in psychological concepts and psychological mindedness, with special focus on understanding and managing the school dropout.
Subjects: Mother-child pairs of lower class families.
Methods: Group, psycho-educational meetings with parents and children; assessments of attitudes and psychological mindedness.
Duration: February 1965-1967.
Investigator(s): John F. Scott, Ph.D., Program Administrator, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604. (Reported by Sebastiano Santostefano, Ph.D., Director of Research, Worcester Youth Guidance Center.)

HEALTH SERVICES

20-SA-1 FOLLOW-UP STUDY

Purpose: To evaluate the work done at the Children's Service Center in residence from January 1943 until December 1964.
Subjects: Children in residence who fall into the following categories: autistic, brain damaged, retarded, personality disorder, or adjustment reaction of childhood or adolescence.
Methods: Each case history is reviewed and pertinent information applied to questionnaire, which is then reviewed and checked by telephone, personal interview, or letter to the parents, or other sources to find out how the child has adjusted socially, academically, etc. The information from the replies received is then typed on index cards and filed.
Duration: October 1964-June 1967.
Investigator(s): Alice Doran, B.A., Research Assistant, Children's Service Center of Wyoming Valley, Inc., 335 S. Franklin St., Wilkes-Barre, Pa.
Publication: Report to be available from the Children's Service Center.

20-SA-2 HOW FAMILIES USE COMMUNITY SERVICES TO MEET THE HEALTH AND WELFARE NEEDS OF CHILDREN

Purpose: To develop a population sampling and interview procedure for determining extent to which community health and welfare services are meeting needs of families with children, and for identifying factors influencing effective utilization of community services by families with children; to demonstrate and evaluate usefulness of this procedure in the work of community planning groups in two contrasting types of communities.
Subjects: 600 families (300 in each of two communities) with children in one of three stages of development: infancy (approximate age of one year); school entrance (first grade, approximate age of six years), or puberty (ninth grade, approximate age of 14).
Methods: Sample frame constructed from birth certificates and school rosters and stratified by ecological area of residence; sample of families to be interviewed selected by random numbers, informant for interviews being mother of child (or other adult female responsible for care of child); data collected through interview instrument designed to elicit through both structured and open-ended questions pertinent facts concerning need for and utilization of community social services, with particular regard to children; questionnaire administered by trained and experienced caseworkers; evaluation made concerning use of this data collection analysis in the community planning process; and recommendations made concerning use of this or similar procedures.
Duration: September 1965-August 1966.
Investigator(s): Robert B. Reed, Ph.D., Proessor of Biostatistics, Harvard School of Public Health, Boston, Mass. (Reported by Reginald Robinson, Ph.D., Executive Director, Massachusetts Committee on Children and Youth, 9 Newbury St., Boston.)
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SA-3 PATTERNS OF PHYSICIAN-USE FOR CHILDREN IN A SUBURBAN POPULATION

Purpose: To describe parental statements concerning use of physician services for children, extent to which emotional or behavioral problems are explicitly involved in these services, and extent to which other sources of help are utilized for these same kinds of problems; to examine relationship between these patterns and parent-respondent's conception of "good health" in children; and to examine relationship between these patterns and social characteristics of parent-respondent.
Subjects: A probability sample of households in a suburban county.
Methods: Survey methods of data collection and analysis.
Findings: A majority of parents use a general practitioner for their children. These parents do not differ in total family income from those who use pediatricians. Parents who do not have a regular family doctor for their children tend to be lower class, as measured by occupational prestige, education, and income.
Duration: August 1963-winter 1966.
Investigator(s): Ann C. Maney, Ph.D., National Institute of Mental Health, Mental Health Study Center, 2340 University Blvd. East, Adelphi, Md. 20783.
Cooperating group(s): National Opinion Research Center.
Publication: Journal articles.

20-SA-4 EVALUATION OF THE HEALTH SERVICES FOR DISADVANTAGED YOUTH PROJECT

Purpose: To evaluate efficacy of a program of health services that seeks to encourage positive orientations towards personal health among low income adolescents by providing them with a new form of medical service, which involves organizing examination and treatment services, in a hospital setting, to approximate the private doctor-patient relationship.
Subjects: Enrollees in the Neighborhood Youth Corps in New Jersey.
Methods: Students are given a self-administered questionnaire to determine attitudes and experiences they bring to the project, then examined, interviewed after examinations, and, where applicable, also after treatment has begun. This information is then supplemented by direct observation. Interviews are also conducted with participating medical personnel to discern form of organization and its consequences for the health attitudes of subjects.
Duration: August 1965-August 1967.
Investigator(s): Bernard Goldstein, Ph.D., Associate Research Specialist, and Joseph M. Conforti (Ph.D., Candidate), Research Associate, Urban Studies Center, Rutgers University, 137 Church St., New Brunswick, N. J.
Cooperating group(s): The New Jersey State Department of Health; Opinion Research Corporation of Princeton N. J.; Office of Economic Opportunity.

20-SA-5 QUALITY OF MEDICAL DATA ON BIRTH RECORD SUPPLEMENTS

Purpose: To study completeness and accuracy of data on the birth certificate and confidential medical supplement and the extent to which completeness and accuracy are related to hospital characteristics and procedures; to attempt to determine practical implications of errors; to prepare reports and recommendations for hospitals and vital statistics offices in procedural and administrative areas for improvement of medical and vital records.
Subjects: Live births occurring in Minnesota during 1966.
Methods: Registered births are sampled, and field investigators are sent to hospitals to abstract information from clinical records. Abstracts are

then compared with information originally recorded on vital records to form basis for study conclusions. Hospitals are pre-surveyed to determine characteristics and procedures.
Duration: February 1966-December 1968.
Investigator(s): Abraham B. Rosenfield, M.D., M.P.H., Director, Division of Special Services and Acting Chief, Section of Maternal and Child Health, and Robert W. Hiller, M.S., Chief, Section of Vital Statistics, Minnesota Department of Health, University Campus; and J. E. Bearman, Ph.D., School of Public Health, University of Minnesota, Minneapolis, Minn. 55440.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SD-1 NATIONAL SPEECH AND HEARING SURVEY

Purpose: To estimate prevalence of speech and hearing disorders in school children; to analyze speech and hearing disorders in terms of age, grade, sex, and other related variables.
Subjects: Cluster sample of subjects in public and private schools in grades 1-12. Approximately 120,000 subjects are to be screened.
Methods: Screening methods for speech and language behavior; air conduction thresholds for hearing. Trained evaluators to be used in teams; use of mobile testing units being considered.
Duration: June 1965-July 1969.
Investigator(s): Forrest M. Hull, Ph.D., Associate Professor, Department of Hearing and Speech Science, Colorado State University, Fort Collins, Colo. 80521.
Publication: Results will probably be published through U. S. Office of Education or as monograph in a professional journal series.

20-SG-1 A STUDY OF PROTRUSIONAL LISPS TO IDENTIFY CHILDREN REQUIRING SPEECH THERAPY

Purpose: To develop a profile of statistically significant factors that, in a general sampling of a primary grade school population, will differentiate those children whose protrusional lisps will correct as they grow older from those who will need the help of a speech therapist to achieve normal speech.
Subjects: Kindergarten children who exhibit a protrusional lisp.
Methods: Use of a number of tests: articulation, motor proficiency, auditory acuity, auditory monitoring ability, social maturity, intelligence, psycholinguistic ability, health, and orthodontic examinations. No child is enrolled in therapy; at the close of a four-year period, subjects are divided into two groups: those who no longer lisp and those who retain their lisp.
Duration: September 1964-June 1969.
Investigator(s): Kathleen Pendergast, Supervisor of Speech and Hearing, Special Education Department, Seattle Public Schools, 815 4th Ave. N., Seattle, Wash. 98109.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

20-SG-2 REDIRECTION OF SCHOOL NURSING SERVICES IN CULTURALLY DEPRIVED NEIGHBORHOODS

Purpose: To determine if a planned program of personal contacts by the

school nurse with parents of kindergarten and first grade pupils, both at school and in the home, in culturally diverse neighborhoods, will increase parental action toward maintenance and promotion of the health of the school child and the prevention of illness.
Subjects: 2,000 pupils from three elementary schools; pupils in three other schools used as controls.
Methods: Non-nurse assistants working under direct supervision of school nurse are assigned selected routine functions ordinarily performed by qualified school nurses in experimental schools. Services of school nurse in experimental schools are being redirected to include routine home visits, parent education study groups, child supervision, and planned coordinated follow-up of health problems at home, at school, and in community. Time and activity studies by both nurse and nurse assistants are administered at selected intervals. Detailed health records are kept on 2,000 study pupils for 18 months.
Duration: 1966-1967
Investigator(s): Doris S. Bryan, R.N., Ph.D., Supervisor of Nursing Services, Department of Health Services, Oakland Public Schools, 1025 2nd Ave., Oakland, Calif. 94606.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SJ-1 A CLINICAL RESEARCH PROGRAM FOR ORAL-FACIAL-COMMUNICATIVE DISORDERS

Purpose: To study the numerous aspects of oral-facial-communicative disorders, with particular reference to cleft lip and cleft palate.
Subjects: Patients with oral-facial-communicative disorders.
Methods: Program includes projects related to surgery, dentistry, orthodontia, prosthodontia, speech, hearing, psychology, social work, and pediatrics--all on the clinical aspects. The biological etiologies include work in chromosome analysis, teratology, and biochemistry.
Duration: October 1964-continuing.
Investigator(s): Herbert K. Cooper, Sr., D.D.S., Director; M. Mazaheri, D.D.S., Chief of Dental Services; Robert Millard, M.A., Director of Speech; and David Coursin, M.D., Director of Research, Lancaster Cleft Palate Clinic, 24 N. Lime St., Lancaster, Pa. 17602.
Cooperating group(s): National Institute of Dental Research, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned for appropriate journals.

20-SJ-2 CAUSAL RELATIONSHIPS BETWEEN TYPE II MALOCCLUSIONS AND SPEECH ANOMALIES

Purpose: To conduct a formal investigation of above problem that should result in: (1) a more comprehensive medical-dental service to children in Pennsylvania; (2) a more effective expenditure of available funds; and (3) a worthwhile contribution to research literature in communication disorders.
Subjects: 45 children with mixed dentition in grades three through five. All subjects must exhibit Type II malocclusions, have four to eight defective speech sounds, and an intelligibility rating of poor by a trained, professional listener using a rating scale.
Methods: Subjects are randomly assigned to three groups of 15 each. One group receives both orthodontic treatment and speech therapy; one group receives only speech therapy; and one group receives no treatment.
Duration: March 1966-June 1968.
Investigator(s): Daniel J. West, M.S., Speech Therapist, Schuylkill

County Public Schools, Pottsville, Pa. (Reported by Kathryn Dice Reier, Director, Bureau of Special Services for Pupils, Pennsylvania State Department of Public Instruction, Harrisburg, Pa.)
Cooperating group(s): Division of Dental Health, Department of Health, Commonwealth of Pennsylvania.
Publication: Publication planned in appropriate professional journals.

20-SM-1 MOBILE UNIT FOR CHILD HEALTH SUPERVISION

Purpose: To compare results, into school age if possible, of comprehensive well baby care and counseling from birth to three years of age in a group of normal firstborn infants with results in a similar group of infants who receive current well baby care provided in clinics of Washington, D. C.
Subjects: 30 to 50 infants in experimental group and a similar control group.
Methods: Mothers expecting first babies in the low income area in environs of Children's Hospital are randomly divided into two groups. The experimental group receives comprehensive care and counseling prenatally and postnatally for the infants via a self-propelled coach which goes to the homes. Group psychiatric counseling is provided for mothers. The control group is given appointments for a neighborhood clinic. The two groups are to be compared at regular intervals as to physical and mental health, social development, language skills, behavior problems, etc. All data are tabulated and scored for statistical analysis on IBM cards.
Duration: May 1965-1971.
Investigator(s): Margaret F. Gutelius, M.D., Director, Child Health Center of Children's Hospital, and Associate Professor of Pediatrics, George Washington University, Washington, D. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication in appropriate journals.

20-SM-2 PROGRAMMED INSTRUCTION IN PRENATAL AND INFANT CARE

Purpose: To determine value of programmed education in comparison to ordinary methods of instruction of high risk patients in value of adequate prenatal and infant care.
Methods: Subjects are pre- and post-tested, and compared with suitable control subjects exposed to usual "prenatal class" type of instruction.
Investigator(s): D. A. Cruise, M.D., Nebraska State Health Department, Lincoln; and Robert H. Messer, M.D., Assistant Professor of Obstetrics and Gynecology, College of Medicine, University of Nebraska, Omaha, Nebr.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SM-3 PREVENTIVE AND THERAPEUTIC INFANT CARE IN PRIVATE OFFICES

Purpose: To investigate practicability of providing Health Department-financed well child supervision in offices of private physicians who provide sick care for same child and family; to investigate and evaluate quality of care given under the two conditions to determine differences between the two groups; and to evaluate impact of engaging in such a program by participating physicians in terms of their acceptance of such

a service and how participation may have changed their well child care. Methods: Study of the following: health status of child; mother's learning experience and her expressed needs and feelings; actions of physicians and nurses involved; utilization of services by patient as noted in medical record; use of public health nurse; and program administration and comparative costs.
Investigator(s): B. Otis Cobb, M.D., Alameda-Contra Costa Medical Association; and Henrik L. Blum, M.D., Health Officer, County of Contra Costa, Oakland, Calif. 94618; and John A. Knowles, M.D., School of Medicine, University of Arkansas, Little Rock, Ark.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SM-4 STUDY OF PARENTAL CONCERNS IN WELL-CHILD SUPERVISION

Purpose: To identify needs and concerns of parents who bring their children to a child health conference.
Subjects: 198 mothers with first children under one year of age, presenting at one of several child health conferences in lower Michigan in Phase I; 51 of the same in Phase II.
Methods: Phase I, a structured attitude-measurement instrument in a card sort format, plus an objective questionnaire; in Phase II, same instruments plus unstructured, in-depth home interview.
Findings: The card sort technique has proven useful, readily acceptable and reliable in the automatic processing of data onto punched cards. Attitudes indicated are less strongly related to socio-economic variables than might be expected. Needs can be described in three categories: medical problems, child care practices, and role of motherhood.
Duration: October 1963-continuing.
Investigator(s): Winifred Connelly, R.N., M.P.H., Research Associate, School of Public Health, University of Michigan, Ann Arbor, Mich. (Reported by Donald C. Smith, M.D., Professor of Maternal and Child Health, School of Public Health, University of Michigan.)
Cooperating group(s): Ann Arbor Child Health Center; Washtenaw, Wayne County, and Central Michigan Health Departments; St. Joseph Mercy Hospital, Ann Arbor.
Publication: Publications in preparation.

20-SM-5 STUDY OF HOME CARE FOR PREMATURE INFANTS IN ARKANSAS

Purpose: To assess effectiveness of a home care program for premature infants.
Subjects: Approximately 200 premature infants born in two Arkansas counties.
Methods: Records of public health nurses visiting these infants in their homes were analyzed extensively.
Duration: Not reported-August 1965.
Investigator(s): Johan W. Eliot, M.D., M.P.H., Assistant Professor of Maternal and Child Health, School of Public Health, University of Michigan, Ann Arbor, Mich. (Reported by Donald C. Smith, M.D., Professor of Maternal and Child Health, School of Public Health, University of Michigan.)
Cooperating group(s): Division of Maternal and Child Health, Arkansas State Board of Health.
Publication: Publications in preparation.

20-SM-6 CONTINUITY AND FRAGMENTATION IN A PEDIATRIC OPD CLINIC

Purpose: To study the problems of continuity and fragmentation of care, and develop techniques and measures for the evaluation and comparison of the effectiveness of various approaches, with the objective of providing better pediatric clinic services.
Subjects: Children of low income families.
Methods: Demographic and health data are obtained on clinic population; present clinic organization, services, and functioning of personnel are studied, and patient's perception of his medical needs, and means of obtaining parent participation are explored.
Duration: December 1965-November 1966.
Investigator(s): Theodore J. DiBuone, M.D., Assistant Professor of Pediatrics and Coordinator, Pediatric Referral Center, and Howard L. Weinberger, M.D., Assistant Professor of Pediatrics and Associate Director, Pediatric OPD Clinic, Upstate Medical Center, State University of New York, Syracuse, N. Y. 13210.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

20-SN-1 ATTITUDES AND PRACTICES RELATING TO FAMILY PLANNING IN A LOWER CLASS URBAN COMMUNITY

Purpose: To investigate selected socio-economic and psycho-social correlates of contraceptive use, attitudes toward family planning, and birth rate in an urban population. Also, to examine use of prenatal facilities.
Subjects: 1,141 mothers, stratified for race and use of private medical care, otherwise randomly selected. 829 were Negro. Of these 281 were unmarried, providing a significant number of cases for special study.
Methods: Interviews were conducted by public health nurses who ordinarily work in the health district in which the mothers live. Data were collected on income, education, use of prenatal facilities, religious identification, attitudes toward change of socio-economic status, etc. Along with these data, information was obtained on past contraceptive use and plans for the future, so that it was feasible to formulate a scale regarding intensity of attitudes about family planning. The second round of interviews, 18 months later, specifically contained items regarding subsequent pregnancies and their outcome. Data are being processed using both descriptive survey techniques and multivariate statistics to describe significant features of the population and to predict attitudes toward family planning of homogeneous subgroups.
Findings: Estimation of mothers' attitudes may be reliably obtained via interview. These attitudes vary, as expected, with race, religion, and marital status. Within each homogeneous subgroup (e.g., single, Negro, non-Catholics) attitudes toward contraception and family planning may be significantly predicted from a combination of sociologic and economic factors.
Duration: 1963-1966.
Investigator(s): Gerald Wiener, Ph.D., Associate Professor; Paul White, Ph.D., Assistant Professor; and Toby Milton, M.A., Instructor, Department of Population and Family Health, School of Hygiene and Public Health, Johns Hopkins University, Baltimore; and Wilson Wing, M.D., Director, Eastern Health District, Baltimore City Health Department, Baltimore, Md. (Reported by Paul A. Harper, M.D., M.P.H., Professor of Maternal and Child Health, Department of Population and Family Health.)
Cooperating group(s): Western Health District, Baltimore City Health Department.

20-SN-2 MICHIGAN INTRAUTERINE CONTRACEPTIVE STUDY

Purpose: To measure the acceptability, effectiveness, and side effects of intrauterine devices as a method of birth control among the socially disadvantaged.
Subjects: Approximately 1,500 women who have registered as patients of two clinics in Detroit.
Methods: Clinic locations, medical techniques, staffing, fees are being developed to provide contraceptive services acceptable to all patients presenting themselves. Methods of publicizing the clinics are adapted to the most socially disadvantaged sectors of the population.
Findings: The intrauterine contraceptive devices are an acceptable and effective method of birth control among the socially disadvantaged.
Duration: July 1963-November 1966.
Investigator(s): Ralph Ten Have, M.D., M.P.H., Research Associate in Maternal and Child Health, School of Public Health, University of Michigan, Ann Arbor, Mich. (Reported by Donald C. Smith, M.D., Professor of Maternal and Child Health, School of Public Health, University of Michigan.)
Cooperating group(s): Planned Parenthood Federation of Detroit.
Publication: Proceedings of the Second International Conference on Intrauterine Contraception, New York, 1964, Excerpta Medica Foundation, Amsterdam; article in American Journal of Public Health; other articles to be published.

20-SN-3 WEST PAKISTAN RESEARCH AND EVALUATION CENTER

Purpose: To study population dynamics and family planning in selected populations in West Pakistan; to help the Commissioner of Family Planning evaluate operation of Family Planning Scheme under Third Five Year Plan.
Subjects: Women of child-bearing age and their families in a village of 12,000 people.
Methods: Interviews to obtain demographic data and knowledge of and attitudes toward family planning; census every 9 to 12 months and systems for registration of births; clinic records of contraceptive services, especially intrauterine devices, vasectomy, and oral contraceptives.
Duration: March 1960-1968.
Investigator(s): Rowland V. Rider, Sc.D., and Paul A. Harper, M.D., Professors, Department of Population and Family Health, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md. 21205.
Cooperating group(s): Population Council; Ford Foundation; Rockefeller Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Population Dynamics, Muramatsu and Harper (Eds.), Baltimore: The Johns Hopkins Press, 1965.

20-SS-1 DIAGNOSTIC CHECK POINT

Purpose: To acquire pertinent information on interdependent individual child, family and school systems by converting kindergarten year of school into a partnership venture between school and psychiatric services; and to feed back information in a continuous dialogue with principal, teachers, etc.
Subjects: Originally, 135 children in one school, to be expanded to four schools, with the eventual goal the total elementary school population of catchment area.
Methods: Psychological tests: Gesell School Readiness Battery, It Test,

and Mackie's Color Discrimination Test; registration interview; social case work; consultation.
Duration: April 1965-indefinite.
Investigator(s): Frank T. Rafferty, M.D., Associate Professor of Psychiatry, and Director, Division of Child Psychiatry, Psychiatric Institute; and James B. Mackie, Ph.D., Assistant Professor of Medical Psychology, University of Maryland, 645 W. Redwood St., Baltimore, Md. 21201.
Cooperating group(s): Baltimore City School System; Friends of Psychiatric Research; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: "The Diagnostic Check Point for Community Child Psychiatry," American Psychiatric Association Regional Research Conference; Epidemiology and Mental Health Planning, April 1966, Psychiatric Institute, University of Maryland. In press.

20-SS-2 THE NURSERY SCHOOL IN PREVENTIVE MENTAL HEALTH

Purpose: To study behavioral changes in children and families as related to mental health factors, such as basic trust, autonomy, initiative, cognitive and social development; to study family utilization of community resources and participation in community activities.
Subjects: A cross-cultural sample of 60 families composed of middle and lower income, Negro, white, and Oriental.
Methods: Utilization of a nursery school setting as a medium for developing in a unitary manner positive mental health factors in the families involved.
Duration: September 1965-September 1970.
Investigator(s): Mary B. Lane, Ed.D., and John Connelly, M.A., Professors of Education, San Francisco State College, 1600 Holloway, San Francisco, Calif. 94127.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

20-SS-3 STUDIES OF DECISION-MAKING IN PSYCHIATRY--PHASE 1

Purpose: To investigate the role of specific factors affecting diagnostic decision-making in psychiatry.
Subjects: 150 psychiatric case records of children ages three to 18, in a child guidance facility. 150 children in a comparable child facility to be used as a validating study.
Methods: Analysis of structure and content of psychiatric case records and of written decisions made by the clinician in regard to data collection; influence of certain variables such as age, symptom of the patient, number, sex, age and psychiatric history of the informants, degree of experience of the clinician, etc., correlated with preliminary decisions; inter-relationships between preliminary and later decisions elucidated. Each case record is transcribed into computer acceptable form by the psychiatric case history and event system, a generalized information processing system developed by the investigators. Subsequently, data in the records are subjected to quantitative and qualitative analysis.
Duration: November 1965-October 1967.
Investigator(s): Bernice T. Eiduson, Ph.D., Director of Research, Reiss-Davis Child Study Center, 9760 W. Pico Blvd., Los Angeles, Calif. 90035.
Cooperating group(s): San Fernando Valley Child Study Center; National

Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Behavioral Science 11:2:133-142, March 1966.

20-SS-4 BRIEF FAMILY THERAPY DEMONSTRATION PROJECT

Purpose: To demonstrate feasibility and effectiveness of a program of brief family therapy in a large metropolitan hospital serving predominantly families of low economic and social status; to elaborate and test criteria for selection of families for brief family therapy; and to evaluate the prophylactic potential of such an approach for younger family members.
Subjects: Late adolescents and adults as original patients, and their families.
Methods: Up to 15 sessions of problem-oriented therapy, utilizing such evaluative measures as the FIRO-B, the Hill Interaction Matrix, the Family Interaction Apperception Test, staff attitude questionnaires, and clinical appraisals.
Investigator(s): C. J. Sager, M.D., Chief, and T. L. Brayboy, M.D., Associate Chief, Family Treatment and Study Unit, New York Medical College-Metropolitan Hospital Medical Center, 1901 First Ave., New York, N. Y.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

20-SS-5 STUDY OF SERVICES FOR EMOTIONALLY DISTURBED CHILDREN IN ALLEGHENY COUNTY, PENNSYLVANIA

Purpose: To compile data on extent of emotional disturbance among children in Allegheny County and on nature and quantity of existing services designed to meet the problem; to develop an overall community plan for provision of additional services needed, and for coordination of all services.
Subjects: All resources treating emotionally disturbed children by organizational and private practitioner located in Allegheny County and serving children between January and December 1965.
Methods: Estimate of prevalence on basis of previous studies and national prevalence estimates; mail survey of organizations to collect information on personnel, budget, facilities, type and quantity of service provided, number and characteristics of children served; mail survey of private practitioners to determine extent and nature of practice; review of material by professional panels; development of recommendations by ad hoc citizens' committee.
Duration: October 1965-June 1967.
Investigator(s): Mary B. Janavitz, M.A., Planning Director, and Paul A. Hummer, M.A., Research Associate, Health and Welfare Association of Allegheny County, 200 Ross St., Pittsburgh, Pa. (Reported by Camille Lambert, Jr., Ph.D., Research Director, Health and Welfare Association of Allegheny County.)
Cooperating group(s): Office of Mental Health, Pennsylvania State Department of Public Welfare; University of Pittsburgh; inpatient and outpatient treatment facilities for emotionally disturbed children.
Publication: Health and Welfare Association publication, available at cost, approximately June 1967.

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20-SS-6 CHILDHOOD PREDICTORS OF THE LEVEL OF DEMAND FOR VETERANS ADMINISTRATION SERVICES

Purpose: To find childhood factors that predict extensive use of Veterans Administration facilities.
Subjects: A sample of Negro men of normal intelligence, born in St. Louis, and who attended St. Louis public schools.
Methods: School and service records of subjects are abstracted to obtain information on kinds and extent of service requested and childhood factors predicting these needs.
Duration: 1965-1968.
Investigator(s): Lee N. Robins, Ph.D., Research Associate Professor in Sociology, Department of Psychiatry, Medical School, Washington University; and Thomas D. Hartnett, M.D., Assistant Chief, Psychiatry and Neurology Service, Veterans Administration Hospital, 915 N. Grand Blvd., St. Louis, Mo. 63106.
Cooperating group(s): Veterans Administration.

20-SS-7 A MENTAL HEALTH STUDY IN COLLEGE PREPARATORY SCHOOLS

Purpose: To determine whether student "problem withdrawals" can be reduced by early detection and appropriate preventive and treatment measures.
Subjects: 400 ninth grade students predicted on a pretested rating scale to experience major difficulties in trying to stay in their respective schools.
Methods: Students are assigned by random assortment to experimental or control category and experimental students are singled out for psychiatric help. Names of control students are kept secret. All students will be followed for five years to compare problem withdrawals of experimentals and controls. In addition, overall problem withdrawal rates for each of the seven schools were recorded for three years prior to the study and are being recorded during the study to see whether the presence of a psychiatrist in a school appears to influence these rates.
Findings: An unanticipated finding, based on supplementary study of the social structure of each school and the way the psychiatric program in each school developed, is that definitions of the proper function of the psychiatrist in the school vary in patterned ways from one school to another.
Duration: February 1965-1970.
Investigator(s): Benjamin H. Balser, M.D., Director, Research and Training; Robert S. Mumford, M.D., and Abraham A. Chaplan, M.D., Assistant Attending Psychiatrists, Department of Psychiatry, St. Luke's Hospital, 421 W. 113th St., New York, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Psychology in the Schools 3:1:6-16, January 1966; paper to be presented at meeting of American Psychiatric Association, May 1967.

20-SV-1 THE PSYCHOLOGICAL EFFECT OF BODILY ILLNESS IN SMALL CHILDREN

Purpose: To investigate immediate psychological effects of physical illness, not requiring hospital admission, upon behavior of preschool children; to study possible effects of age and sex of child and of severity of illness upon his reaction to illness; to determine whether behavior patterns of acute and convalescent phases of the illness are separate and distinct.

Subjects: 20 boys and 20 girls between the ages of two and four years, who suffer from an acute illness for which they are being nursed at home by their mothers.
Methods: Nature and severity of the children's illnesses will be determined by the pediatrician, who also gives continuous medical attention to the children. Daily observations of the behavior of the sick children will be made and recorded by their mothers who will follow an outline covering, e.g., changes in mood, motility, verbalization, activity pattern, interaction with familiar persons and objects, etc. The psychiatrist will make a home visit immediately after acute phase of sickness in order to collect and complete data regarding the child's reaction. Approximately half of sample will be investigated during a second illness to ascertain whether children's reaction to first illness was characteristic for them rather than a specific reaction to a specific illness. The Vineland Social Maturity Scale and Anna Freud's Concept of Developmental Lines will be used in order to assess children's pre-illness social and emotional maturity.
Findings: Most children show two major types of reaction: either withdrawing from environment, appearing seriously ill despite often mild infectious illnesses, or becoming clinging, demanding, wanting a surplus of attention from their mothers (implying regression in object relationships); regardless of severity of illness, a preschool child seems to react in a similar way during repeated illnesses at home; convalescent phase is almost always associated with transient whiny, demanding, impatient attitudes towards environment, especially the mother.
Duration: February 1965-continuing.
Investigator(s): Ake Mattsson, M.D., Instructor in Child Psychiatry, and Israel Weisberg, M.D., Assistant Professor of Pediatrics, Western Reserve University School of Medicine, Cleveland, Ohio 44106.
Publication: To be published in a pediatric and a psychiatric journal.

ORGANIZATIONS

ARIZONA

- Arizona State University
  - Education 20-OD-1
  - School of Social Service 20-RM-2
- University of Arizona
  - Psychology 20-EG-1, 20-HG-3

ARKANSAS

- University of Arkansas
  - School of Medicine 20-SM-3

CALIFORNIA

- Alameda-Contra Costa Medical Association 20-SM-3
- American Institute for Research in the Behavioral Sciences 20-IG-7
- California State College
  - Fullerton
    - Education 20-CP-1
  - Los Angeles
    - Special Education 20-FG-12
- California State Department of Corrections
  - Parole Outpatient Clinic 20-IV-4
- California State Department of Education
  - Bureau of NDEA 20-PG-4
- California State Department of Mental Hygiene
  - Social Research Laboratory 20-LJ-2
- California State Department of Public Health 20-HN-2
- California Youth Authority
  - Division of Research 20-JM-10, 20-JV-3, 20-JY-2, 20-KG-5--8, 20-KM-1, 20-KM-2, 20-KP-1, 20-KP-2
- Camp Fire Girls, Los Angeles Area Council 20-RD-1
- Children's Hospital (Los Angeles) 20-CA-1
- Contra Costa County 20-SM-3
- Cowell Hospital 20-CJ-1
- Harbor General Hospital 20-IV-9
- Kaiser Foundation Hospital
  - Obstetrics and Gynecology 20-AA-5
  - Pediatrics 20-AA-5

CALIFORNIA (cont'd.)

- Mental Retardation Joint Agencies Project 20-HR-1
- Monterey Institute for Speech and Hearing 20-IV-1
- Oakland Public Schools
  - Department of Health Services 20-SG-2
- Pacific State Hospital
  - Socio-Behavioral Laboratory 20-HA-1
- Presbyterian Medical Center (San Francisco)
  - Heart Center 20-FG-7
  - Institute of Neurological Sciences 20-FG-13
  - Youth Clinic 20-AA-10
- Reiss-Davis Clinic for Child Guidance 20-IA-1, 20-SS-3
- Rowland School District
  - Research and Guidance Department 20-BA-8
- San Francisco State College
  - Counseling 20-RV-1
  - Education 20-SS-2
  - Frederic Burk Foundation for Education 20-QM-4
- San Mateo County General Hospital
  - Division of Neurology 20-FD-5
- Santa Clara County Office of Education 20-PG-4
- Sonoma County Schools
  - Guidance 20-CJ-3
  - Research and Data Processing 20-CJ-3
- Southern California Permanente Medical Group 20-NM-2
- Stanford University
  - Anatomy 20-AA-12
  - Education 20-PG-3, 20-QJ-13
  - Psychology 20-QJ-13
  - School of Medicine 20-AA-10
    - Institute for Childhood Aphasia 20-IG-4
  - Sociology 20-LA-4
  - Statistics 20-QJ-13
- System Development Corporation 20-CA-1
- Torrance Unified School District 20-OP-2
- University of California
  - Berkeley
    - Biostatistics 20-AA-5
    - Education 20-CG-7, 20-QJ-3

- University of California
  - Berkeley (cont'd.)
    - Institute of Human Development 20-AA-6
  - Los Angeles
    - Education 20-JM-2, 20-QJ-7
    - Psychology 20-BU-4, 20-IP-4
    - School of Medicine
      - Medical Psychology 20-IV-9
      - Psychiatry 20-HA-1
    - School of Public Health
      - Psychiatry 20-HA-1
  - San Francisco
    - School of Medicine 20-FJ-1
  - Santa Barbara
    - Education 20-IV-5
    - Speech and Hearing Clinic 20-BU-5
- University of Southern California
  - Educational Psychology 20-BA-8
  - Youth Studies Center 20-KD-2

COLORADO

- Children's Asthma Research Institute and Hospital 20-BU-9
- Colorado State College
  - Anthropology 20-QJ-2
  - Education 20-QJ-2
  - Psychology 20-QJ-2
  - Sociology 20-QJ-2
- Colorado State University
  - Hearing and Speech Science 20-SD-1
- Denver Juvenile Court 20-JV-2
- University of Colorado
  - Child Research Council 20-AA-1
- University of Denver
  - Education 20-OM-9
  - Psychology 20-QA-1
- Western Interstate Commission for Higher Education 20-HA-2

DELAWARE

- Children's Bureau of Delaware, Inc.
  - Delaware Family Study 20-RJ-3

DISTRICT OF COLUMBIA

- American Association for Health, Physical Education, and Recreation 20-BM-1
- Children's Hospital
  - Child Health Center 20-SM-1
  - Neurology 20-BA-12
  - Psychiatry 20-NA-3
- George Washington University
  - Pediatrics 20-SM-1
  - Psychology 20-CG-5, 20-CJ-5

DISTRICT OF COLUMBIA (cont'd.)

- Howard University
  - Baker's Dozen Community Health Center for Adolescents 20-RX-1
  - School of Social Work 20-RM-1
- Washington School of Psychiatry 20-BA-12

FLORIDA

- Florida State Department of Education 20-PD-7
- Florida State University
  - Educational Research and Testing 20-OM-7, 20-PD-7
  - Institute of Human Development 20-OM-6
- Sunland Hospital 20-HD-3
- University of Florida
  - Education 20-PD-7
  - Food Technology and Nutrition 20-BD-4
- Welfare Planning Council of Dade County 20-RD-2
- Young Women's Christian Association of Miami 20-RD-2

GEORGIA

- Georgia State College
  - Psychology 20-FD-7, 20-FG-14
- University of Georgia
  - Child Development 20-PA-1
  - Psychology 20-BP-2

HAWAII

- University of Hawaii
  - Child Development and Family Study 20-NA-2
  - College of Tropical Agriculture 20-BG-2

ILLINOIS

- American Academy of Pediatrics
  - Committee on Adoptions 20-RJ-1
- Illinois State University
  - Education 20-QJ-16
  - Psychology 20-QD-1
- Loyola University
  - Bellarmine School of Theology 20-DJ-1
- Mental Health Association (Springfield) 20-FG-1
- Michael Reese Hospital
  - Psychiatric Institute 20-IG-6
- Northern Illinois University
  - Education 20-HG-2
  - Psychology 20-CG-12

ILLINOIS (cont'd.)

- Northwestern University
  - Hearing Clinic 20-FD-1
  - Sociology 20-NA-6
- Roosevelt University
  - Sociology and Anthropology 20-KA-4
- School District No. 172, Quincy
  - Demonstration Center 20-QB-2
- Southern Illinois University
  - Delinquency Study Project 20-QJ-4
  - Education 20-CP-2
  - Guidance and Counseling 20-QB-2
  - Psychology 20-DD-5
- University of Chicago
  - Comparative Education Center 20-NA-6
  - Educational Administration 20-MA-2
  - Educational Policy Studies 20-NA-10
  - Educational Psychology 20-OM-3
  - Human Development 20-BA-4
  - Psychiatry 20-BA-4
  - Psychology 20-FG-5, 20-NA-11
  - Social Psychology Laboratory 20-NG-1
  - Social Service Administration 20-RV-2
  - Surgery 20-FG-5
- University of Illinois
  - Children's Research Center 20-IV-6
  - Psychology 20-CA-4
  - Sociology 20-KG-1
  - Training Research Laboratory 20-CP-4
- Western Illinois University
  - Music Education 20-PG-1

INDIANA

- Ball State University
  - Psychology 20-DA-1
- Evansville-Vanderburgh School Corporation
  - Reading Services 20-PD-1
- Indiana University
  - Audio-Visual Center 20-CP-3
  - Education 20-CP-3, 20-OY-1, 20-QJ-5
  - Medical Center
    - Neurological Surgery 20-FG-15
    - Neuropsychology 20-FG-15
  - Psychology 20-QJ-5
  - Special Education 20-QJ-5
- Purdue University
  - Psychology 20-BP-5
  - Sociology 20-DD-2
- University of Notre Dame
  - Sociology 20-NA-7

IOWA

- Cedar Rapids Community School District 20-CG-9
- Iowa State University
  - Food and Nutrition 20-BG-1
- University of Iowa
  - Institute of Child Behavior and Development 20-CG-11
  - Pediatrics 20-FJ-5
  - Sociology and Anthropology 20-JJ-1

KANSAS

- Kansas State Department of Public Instruction
  - Special Education 20-QA-1
- University of Kansas
  - Sociology 20-OY-8

KENTUCKY

- Shawnee High School 20-RD-2
- University of Kentucky 20-BP-2

LOUISIANA

- Jewish Children's Home Service 20-RA-2
- Louisiana State University
  - Psychology 20-OS-4, 20-PA-2

MAINE

- Pineland Hospital and Training Center 20-HT-3

MARYLAND

- Baltimore City Health Department
  - Eastern Health District 20-SN-1
- Health and Welfare Council of the Baltimore Area, Inc. 20-RA-1, 20-RJ-2
- Institute for Behavioral Research, Inc. 20-KM-5
- Johns Hopkins University
  - School of Hygiene and Public Health
    - Population and Family Health 20-SN-1, 20-SN-3
  - School of Medicine
    - Medical Psychology 20-CJ-2
    - Neurocommunications Laboratory 20-BU-10
    - Pediatrics 20-CJ-2
    - Psychiatry 20-BU-10
  - Social Relations 20-BU-3, 20-JM-3
- University of Maryland
  - Child Psychiatry 20-SS-1
  - Medical Psychology 20-SS-1
  - Sociology 20-DD-2
  - Speech 20-BU-7

MARYLAND (cont'd.)

U. S. Industries, Inc.
  Educational Science Division 20-ND-2

MASSACHUSETTS

Austen Riggs Center 20-CG-3
Boston College
  Sociology 20-OV-1
Boston University
  Medical Center
    Psychiatry 20-BP-1
  Psychology 20-NA-4
Children's Hospital Medical Center 20-FG-10
Clark University
  Psychology 20-CM-2
Harvard University
  Center for Field Studies 20-OM-8
  Graduate School of Education 20-BD-3, 20-OM-8
  Law School 20-JJ-2
  Medical School
    Psychiatry 20-IP-5
  Psychology 20-CD-1
  Public Health
    Biostatistics 20-AA-2, 20-EA-2
    Maternal and Child Health 20-EA-2, 20-SA-2
    Mental Health 20-IV-7
    Physiology 20-AA-4
  Social Relations 20-BU-11
James Jackson Putnam Children's Center 20-IG-1
Massachusetts General Hospital
  Alcohol Clinic and Acute Psychiatric Service 20-JY-1
  Child Psychiatry Unit 20-IV-7
Massachusetts Mental Health Center 20-IP-5
Medical Foundation, Inc. 20-EG-2
University of Massachusetts 20-CD-3
Williams College
  Psychology 20-CG-2
Worcester State Hospital 20-LJ-3
Worcester Youth Guidance Center 20-DD-4, 20-FJ-3, 20-HG-8, 20-HP-2 20-LJ-3, 20-RM-3, 20-RZ-1

MICHIGAN

Albion College
  Psychology 20-CG-4
Battle Creek Public Schools
  Division of Instruction 20-BD-2
Eastern Michigan University
  Horace C. Rackham School of Special Education 20-IY-2
Merrill-Palmer Institute 20-BD-6

MICHIGAN (cont'd.)

Michigan State University
  Education 20-NA-9
  Psychology 20-IG-4
  Social Science Teaching Institute 20-OM-1
Pontiac Public Schools
  Research and Evaluation 20-OM-11
University of Michigan
  Education 20-CG-6
  Institute for Social Research 20-DD-6
  Medical School
    Communicable Diseases 20-CG-6
    Pediatrics 20-CG-6
    Psychology 20-CG-6
  Population Studies Center 20-LG-1
  School of Public Health
    Maternal and Child Health 20-CG-6, 20-SM-4, 20-SM-5, 20-SN-2
Wayne County Training School 20-HT-4
Western Michigan University
  Teacher Education 20-OM-1
  Sociology 20-OM-1
Wyandotte Public Schools 20-OP-1

MINNESOTA

Duluth Board of Education 20-HG-10
Faribault State School and Hospital 20-HG-10
Gustavus Adolphus College
  Sociology 20-ED-1
Lutheran Social Service of Minnesota
  Division of Child Welfare 20-ED-1
Minnesota State Department of Health
  Maternal and Child Health 20-SA-5
  Vital Statistics 20-SA-5
Owatonna State School 20-HD-1
University of Minnesota
  Family Studies and Sociology 20-LA-1
  Industrial Relations Center 20-ND-4
  Institute of Child Development 20-CG-8, 20-EA-1
  Medical School
    Psychology 20-FD-3
  School of Public Health
    Biostatistics 20-SA-5
Washburn Memorial Clinic 20-FD-3
Willmar State Hospital 20-HD-1

MISSOURI

Jewish Hospital of St. Louis
  Speech Pathology 20-FD-2
St. Louis University
  Child Development Clinic 20-HG-6
  Pediatrics 20-HG-6

MISSOURI (cont'd.)

- Washington University
  - Medical School
    - Psychiatry 20-LJ-1, 20-SS-6

NEBRASKA

- Nebraska State Health Department 20-SM-2
- University of Nebraska
  - College of Dentistry
    - Orthodontics 20-BJ-2
  - College of Medicine
    - Obstetrics and Gynecology 20-SM-2
  - Human Development and the Family 20-DD-3

NEVADA

- Clark County School District
  - Equal Educational Opportunities
    - In-Service Program 20-OS-1, 20-QJ-1

NEW HAMPSHIRE

- Dartmouth College
  - Psychology 20-CA-5

NEW JERSEY

- Child Guidance Clinic (East Orange) 20-IV-3
- Educational Testing Service 20-BA-9
- Elisabeth Morrow School 20-CJ-6
- E. R. Johnstone Training and Research Center 20-HG-5
- New Jersey Neuro-Psychiatric Institute Children's Unit 20-JM-1
- Rutgers University
  - Sociology 20-QM-1
  - Urban Studies Center 20-SA-4

NEW MEXICO

- New Mexico State University
  - Psychology 20-QM-6
  - Speech 20-QM-6

NEW YORK

- Alfred University
  - Psychology 20-DA-2
- American Foundation for the Blind 20-FA-2
- Berkshire Farm Institute for Training and Research 20-JG-1
- Board of Cooperative Educational Services (Yorktown Heights) 20-OS-3

NEW YORK (cont'd.)

- Center for Urban Education
  - Child Learning and Development 20-BA-11
- Children's Hospital (Buffalo)
  - Pediatrics 20-BJ-1
  - Radiology 20-BJ-1
- City University of New York
  - Brooklyn College
    - Education 20-MG-1
  - City College
    - Division of Teacher Education 20-QJ-8, 20-QJ-17, 20-QJ-18
    - Education 20-OS-5, 20-PD-6
  - Queens College
    - Education 20-QJ-8, 20-QJ-11
- Civic Center Clinic (New York) 20-JV-1
- Columbia University
  - College of Physicians and Surgeons 20-BA-2
  - Psychiatry 20-BA-2
  - Teacher's College
    - Special Education 20-CA-2, 20-QG-1
- Consultation Services (New York) 20-NA-2
- Cornell University
  - Anthropology 20-PD-3
  - Child Development 20-BP-7, 20-PD-3
  - Education 20-PD-3
  - Linguistics 20-PD-3
  - Psychology 20-BP-4, 20-MD-2, 20-PD-3
- Eastman Dental Center 20-BJ-3
- Educational Alliance 20-OY-5
- Federation of the Handicapped, Inc. 20-HR-3, 20-QM-3
- Hawthorne Cedar Knolls School 20-IY-4
- Henry Ittleson Center for Child Research 20-IP-2, 20-IP-3
- Hofstra College 20-BP-3
- James Weldon Johnson Mental Health Clinic 20-IV-8
- Jewish Hospital of Brooklyn
  - Pediatric Psychiatry 20-HD-2, 20-HG-1
- Long Island University
  - Education 20-NA-12
  - Psychology 20-NM-4
- Milbank Memorial Fund 20-NM-1
- New York City Board of Education 20-PG-2
- New York City Youth Board 20-KD-5
- New York Medical College
  - Metropolitan Hospital Medical Center
    - Family Treatment and Study Unit 20-SS-4
- New York Service for the Orthopedically Handicapped 20-FJ-4
- New York State Department of Social Welfare 20-KG-4

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- New York State Division for Youth 20-QN-1
- New York University Medical Center
  - Institute of Physical Medicine and Rehabilitation 20-FG-1
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- Psychiatric Clinic, Inc. (Buffalo) 20-IV-2
- State University of New York
  - Brockport
    - Demonstration School 20-PD-10
    - Secondary Education 20-PD-10
  - Brooklyn
    - Downstate Medical Center 20-IP-1
  - Buffalo
    - Speech Pathology and Audiology 20-IG-2
  - Plattsburgh
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- Union College and University
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- United Community Centers, Inc. 20-KD-3
- University of Rochester
  - Psychology 20-BP-7
- Wakoff Research Center 20-OM-5
- Warwick State Training School for Boys 20-KM-3
- Yeshiva University
  - Albert Einstein College of Medicine 20-AA-8
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NORTH CAROLINA

- Duke University
  - Medical Psychology 20-FG-2, 20-FP-1
  - Psychology 20-FG-3
- East Carolina College
  - Sociology and Anthropology 20-EA-3
- Governor Morehead School 20-FD-4
- North Carolina Department of Mental Health 20-FD-4

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- University of North Carolina
  - Anthropology 20-NA-1
  - Orthodontics 20-BD-1
  - Psychology 20-GA-1

OHIO

- Antioch College
  - Fels Research Institute
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- Community Action for Youth (Cleveland) 20-BA-6
- Ohio State University
  - School of Medicine
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  - Sociology 20-OM-1
- University Hospitals (Cleveland)
  - Child Psychiatry 20-FG-8, 20-SV-1
- University of Akron
  - Education 20-PD-8
- Western Reserve University
  - Anatomy 20-AA-12
  - Mental Development Center 20-BA-6
  - School of Medicine
    - Child Psychiatry 20-FG-11
  - Sociology 20-LD-1

OKLAHOMA

- Oklahoma City Schools
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OREGON

- Oregon Fairview Home 20-HR-2
- Reed College
  - Sociology 20-NM-3
- University of Oregon
  - Center for Advanced Study of Educational Administration 20-ND-3
  - Dental School
    - Child Study Clinic 20-AA-11
  - Health, Physical Education, and Recreation 20-AA-7
  - Medical Psychology 20-DG-1
  - Psychology 20-IS-2
  - Sociology 20-OS-2

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- Association for Jewish Children 20-RM-2
- Bryn Mawr College
  - Child Development and Education 20-FG-9
- Children's Hospital of Philadelphia
  - Psychological Pediatrics 20-BA-10
- Children's Service Center of Wyoming Valley, Inc. 20-SA-1

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- Devereux Schools (Devon) 20-HG-9, 20-IY-1, 20-IY-3
- Health and Welfare Association of Allegheny County 20-SS-5
- Lancaster Cleft Palate Clinic 20-SJ-1
- Pennsylvania State University
  - Child Development and Family Relationships 20-CD-2
  - Psychology 20-MA-1
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  - Special Education 20-QM-7
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  - Speech Therapy 20-SJ-2
- Temple University
  - Elementary Education 20-QJ-12
  - Group Dynamics Center 20-OV-2
  - School of Medicine
    - Microbiology 20-NA-13
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- University of Pennsylvania
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- University of Pittsburgh
  - Medical School
    - Psychiatry 20-BU-6
  - Reading Laboratory 20-PD-4
  - Special Education and Rehabilitation 20-FG-4, 20-HJ-2
- University of Scranton
  - Chemistry 20-HN-1
- Western Psychiatric Institute and Clinic 20-LA-2

PUERTO RICO

- University of Puerto Rico
  - Education 20-NA-9
  - Social Science Research Center 20-JJ-2

RHODE ISLAND

- Brown University
  - Child Health and Development Center 20-HT-2

SOUTH CAROLINA

- Our Lady of Mercy Welfare Center 20-KD-4

TENNESSEE

- George Peabody College for Teachers
  - John F. Kennedy Center for Research on Education and Human Development 20-CA-3
  - Psychology 20-EA-5
- University of Tennessee
  - Psychology 20-EA-4
- Vanderbilt University
  - Bill Wilkerson Hearing and Speech Center 20-QJ-9
  - Linguistics 20-BU-1

TEXAS

- Ben Taub General Hospital
  - Psychiatric In-patient Services 20-OY-2
- Good Samaritan Center (San Antonio) 20-QJ-15
- Houston-Harris County Lighthouse for the Blind 20-QM-5
- Rice University 20-CJ-4
- Sisters of Charity of the Incarnate Word 20-HJ-1
- Southwest Texas State College
  - Education 20-QM-2
  - Speech, Hearing, and Language Clinic 20-QM-2
- Texas Southern University
  - Sociology 20-OY-6
- University of Houston 20-CJ-4
- University of Texas (Austin) 20-FG-4
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  - Sociology 20-KA-1
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- University of Texas (Galveston)
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UTAH

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  - Speech and Audiology 20-HP-1
- University of Utah
  - Psychology 20-JM-4, 20-PD-2
- Utah State Industrial School 20-JM-4

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- Hollins College
  - Psychology 20-BU-2
- Old Dominion College
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University of Virginia
  School of Medicine
    Pediatrics 20-FA-1
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Seattle Public Schools
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University of Washington
  School of Medicine
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University of Wyoming
  Psychology 20-DD-1
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    Psychiatry and Neurology Service
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  Psychiatry 20-IG-3

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  Division of Child Welfare 20-KG-3
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University of British Columbia
  Pediatrics 20-FG-6
University of Toronto
  Institute of Child Study 20-BA-1,
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National Taiwan University (Taipei)
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ENGLAND

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GERMANY

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Ambrose, J. A. 20-BA-3
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Anderson, Claire 20-RV-2
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Anderson, William F. 20-HW-1
Anthony, E. James 20-LJ-1
Anthony, Sister Mary 20-KD-4
Appleton, Martin D. 20-HN-1
Armer, J. Michael 20-OS-2
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Atkinson, Richard C. 20-QJ-13
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Balser, Benjamin H. 20-SS-7
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Banham, Katharine M. 20-FG-3
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Klein, Malcolm W. 20-KD-2
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BIBLIOGRAPHY ON DEAFNESS

The Alexander Graham Bell Association for the Deaf, 1537 - 35th Street, N. W., Washington, D. C. 20007, recently published its *Bibliography on Deafness*, a cumulative index of articles selected from the *Volta Review* and the *American Annals of the Deaf*. The book is available from the Association for $3.50 in paperbound edition and $10.00 for the casebound.

CENTER FOR STUDY OF UNEMPLOYED YOUTH

The Center for the Study of Unemployed Youth has been established as a part of the Graduate School of Social Work of New York University. It is concerned with training, consultation, curriculum development, and research relating to the employment problems of disadvantaged youth. Further information may be obtained from the Center, located at 853 Broadway, New York, N. Y. 10003.

CORRECTIONAL MANPOWER AND TRAINING

The Joint Commission on Correctional Manpower and Training, a private, non-profit organization, has begun a program of research and study of personnel practices and current and projected personnel needs in correctional rehabilitation. A major portion of the study will be devoted to education of manpower for effective work in corrections. Included in the study will be an evaluation of the effectiveness of present methods of recruiting, selecting, and utilizing personnel. The work of the Commission encompasses both the juvenile and adult correctional fields. Further information may be obtained by writing to the Commission at 1522 K Street, N. W., Washington, D. C. 20005. (*Child Welfare*, October 1966, pp. 464-466).

LAW ENFORCEMENT ASSISTANCE ACT

Under the Law Enforcement Assistance Act of 1965 (P.L. 89-197--LEAA), the Department of Justice is authorized to award federal funds for projects which "may create, experiment with, test or demonstrate new knowledge or techniques in crime prevention, crime detection, law enforcement, and the administration of criminal justice and corrections." For further information write to the Office of Law Enforcement Assistance, U. S. Department of Justice, Washington, D. C. 20530.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind. 47907.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn. 06102.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. 48103. (Gives synopses of U. S. doctoral dissertations with an annual index).
dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington, D. C. 20002.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York, N. Y. 10029.
Inventory of Social and Economic Research in Health, Health Information Foundation, 5555 So. Ellis Ave., Chicago, Ill. 60637.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York, N. Y. 10017.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y. 10019.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington, D. C. 20036.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago, Ill. 60612.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York, N. Y. 10003.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York, N. Y. 10024.

Through the Educational Research Information Center, better known as ERIC, reliable current research and research-related information will be made available to teachers, administrators, researchers, commercial organizations, and others. ERIC also includes twelve clearinghouses, or documentation centers, located at universities and other institutions throughout the country. Each clearinghouse will concentrate on a different subject-matter area. As of July 1966, ERIC had published two indexes-- Catalog of Selected Documents on the Disadvantaged: a Number and Author Index (OE-37001) and a Subject Index (OE-37002). These are available from the U. S. Government Printing Office, Washington, D. C. 20402, for $0.65 and $3.00, respectively. More complete information may be obtained by writing to the Director of ERIC, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20202.

The Excerpta Medica Foundation, New York Academy of Medicine Building, 2 E. 103rd St., New York, N. Y. 10029, has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, the Foundation can provide to subscribers, at cost, photocopies and translations of complete articles.

Harvard University Graduate School of Education now operates a Clearinghouse on Educational Differences. Its purpose is to serve as a center of information in the area of individual differences in education, with special attention on materials dealing with learning, cognition, child development, achievement and personality traits as they relate to education. The Clearinghouse has prepared a number of acquisitions lists and bibliographies, and also plans to publish a news letter. For information on their services, write to them at Harvard University, Larsen Hall, Appian Way, Cambridge, Mass. 02138.

The Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Minnesota Family Study Center can supply to interested scholars bibliographic information from the Inventory of Published Research in Marriage and Family Behavior. Requests for information should be addressed to the Director, Inventory of Published Research in Marriage and Family Behavior, Social Science Tower 1026, University of Minnesota, Minneapolis, Minn. 55455. (Journal of Marriage and the Family, May 1966, p. 142).

The Library of the National Society for Crippled Children and Adults has initiated a photoduplication service for persons engaged in rehabilitation research. It is available without charge to personnel in educational or research institutions and health or welfare agencies, public or private. This service hopes to provide the necessary professional literature not available in local libraries. Further information may be obtained by writing to the Librarian of the Society, 2023 W. Ogden Ave., Chicago, Ill. 60612. (Rehabilitation Literature, April 1966, p. 109).

The Science Information Exchange, Smithsonian Institution, 209 Madison National Bank Bldg., 1730 M St., N. W., Washington, D. C. 20036, provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

> In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic Act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research relating to children in order to make such information available for the use of investigators, administrators, program planners, and practitioners.

Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. A free copy of each issue is also sent to directors of research centers and to libraries. In addition, the Clearinghouse maintains a mailing list of interested persons who receive announcements of new issues as they are published. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The Children's Bureau Clearinghouse routinely exchanges information with the Science Information Exchange of the Smithsonian Institution. This organization is very helpful in providing abstracts of research supported by federal funds and by many foundations.

The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
WELFARE ADMINISTRATION

Children's Bureau **Washington, D.C. 20201**

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INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D C. 20201

If you or your colleagues are currently engaged in research on children or their families, we would greatly appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to provide research investigators with information about other research in progress, to point up gaps in present research, and thereby to stimulate more effective research.

The instructions on the preceding page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

____

Thank you for your cooperation.

INFORMATION SUPPLIED BY	Name ____________________ Position ____________________ Organization and address ____________ __________________________ ____________ ZIP CODE __________

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SUMMARY OF RESEARCH PROJECT

Title:

Purpose:

Subjects (sample):

Methods:

Findings to date, if any:

Date project initiated: Estimated terminal date:

Principal investigator(s) only	Degree	Position and organization

Cooperating groups (in the research or in the funding of the research):

Publication references and/or plans (If no publication is planned, please indicate under what conditions data and results will be available):

If this represents work toward an academic degree, please state degree ________________________.
(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry.)

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name____

Address______________________________________

____

Name____

Address______________________________________

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Name____

Address______________________________________

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Name____

Address______________________________________

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Signed______________________

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Previous Issues of

RESEARCH RELATING TO CHILDREN

Single copies of the following issues are available without charge from the Clearinghouse for Research in Child Life, Children's Bureau, Welfare Administration, Department of Health, Education, and Welfare, Washington, D. C. 20201. (Dates indicate period during which studies were reported to us).

Bulletin II, Supplement 2 (November 1952-May 1954)
Bulletin II, Supplement 3 (April 1954-January 1955)
Bulletin II, Supplement 4 (February-November 1955)

The following issues are available for purchase directly from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, at the prices indicated:

Bulletin 4 (May-September 1956) - 75 cents
Bulletin 9 (August 1958-February 1959) - $1.00
Bulletin 17 (February 1963-February 1964) - 75 cents
Bulletin 18 (March-December 1964) - $1.25
Bulletin 19 (January-September 1965) - $1.50

The following issues are OUT OF PRINT but are available in many libraries:

Bulletin I (December 1948-June 1949)
Bulletin I, Supplement 1 (July 1949-March 1950)
Bulletin I, Supplement 2 (April-July 1950)
Bulletin I, Supplement 3 (August-December 1950)
Bulletin I, Supplement 4 (January-April 1951)
Bulletin I, Supplement 5 (May-December 1951)

Bulletin II (January-October 1952)
Bulletin II, Supplement 1 (January 1952-March 1954)

Bulletin 3 (December 1955-April 1956)
Bulletin 5 (October 1956-February 1957)
Bulletin 6 (March-July 1957)
Bulletin 7 (August 1957-February 1958)
Bulletin 8 (March-July 1958)
Bulletin 10 (March-July 1959)
Bulletin 11 (August 1959-February 1960)
Bulletin 12 (February-July 1960)
Bulletin 13 (August 1960-January 1961)
Bulletin 14 (February-September 1961)
Bulletin 15 (October 1961-June 1962)
Bulletin 16 (July 1962-January 1963)

An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. A free copy of each issue is also sent to directors of research centers and to libraries. In addition, the Clearinghouse maintains a mailing list of interested persons who receive announcements of new issues as they are published.

bulletin no. 21

RESEARCH relating to CHILDREN

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL and REHABILITATION SERVICE
children's bureau
1967

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CHILDREN'S BUREAU - Katherine B. Oettinger, Chief
Division of Research - Charles P. Gershenson, Director
Child Life Studies Branch - Elizabeth Herzog, Chief

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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RESEARCH relating to CHILDREN

Bulletin 21

Current and recently completed studies on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIO-ECONOMIC and CULTURAL FACTORS
- SOCIAL SERVICES
- HEALTH SERVICES

June 1966-April 1967

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

For sale by the Superintendent of Documents, U.S. Government Printing Office
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FOREWORD

This Bulletin, like previous issues, includes reports of research in progress or recently completed. With the exception of the long-term research, it does not report again studies included in Bulletins 3 through 20 even though they may still be continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse June 1966 through April 1967.

The Clearinghouse has only such information about the studies as the abstracts provide. Publication references and plans are given by some of the investigators but the Clearinghouse does not maintain bibliographic information on published reports of the studies. The reader who wishes to obtain further details about any of the projects reported should check professional journals in the appropriate field or write directly to the investigator.

For the Clearinghouse, I wish to thank those who have submitted reports on their own projects and those who have told us of other studies, and to acknowledge the valuable assistance of the Science Information Exchange, and the foundations which provide us with information about their research grants.

Katherine B. Oettinger

Katherine B. Oettinger
Chief, Children's Bureau
SOCIAL AND REHABILITATION SERVICE

NOTE: Within the U.S. Department of Health, Education, and Welfare, the Welfare Administration has been superseded by the Social and Rehabilitation Service, and the Vocational Rehabilitation Administration is now the Rehabilitation Services Administration.

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 171 is a form for letting us know of other investigators who are working in the field. Page 170 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG-TERM RESEARCH

Note: The reports in this section
concern research programs which are
more or less continuous.

21-AA-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and postnatal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (80 percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado, 4200 E. Ninth Ave., Denver, Colo. 80220.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; Nutrition Foundation; National Live Stock and Meat Board; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Appropriate medical or scientific journals every year. Publication lists available.

21-AA-2 **ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTI-DISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS**

Initiation date: 1930.
Investigator(s): Research has been discontinued but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor of Biostatistics, Harvard School of Public Health, 55 Shattuck St., Boston, Mass. 02115.

21-AA-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

21-AA-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long-term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from pre-puberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left-handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Harvard Florence Research Project, Via Venezia 10, Florence, Italy.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publication: Numerous journal articles; one book is planned, another possible.

21-AA-5 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT

Purpose: To investigate the relationship of biologic, genetic, and environmental factors in the parents--including events during pregnancy, labor, and delivery--to normal and abnormal development of offspring. Expected byproducts of investigation are relationships of these factors to pregnancy wastage in the form of early fetal death, perinatal mortality, infant and childhood mortality, and estimates of incidence of different types of abnormalities. In addition, detailed growth curves for children from birth to six years of age will be derived on a longitudinal basis, and estimates of illnesses and injuries in infancy and the pre-school child will be derived.
Subjects: Members of the Kaiser Foundation Health Plan--a pre-paid medical care program--who reside in the San Francisco-East Bay area.
Methods: Study is of a prospective, longitudinal type for both mother and child. Observations are made on the gravidas in the Department of Obstetrics and Gynecology, and on the children in the Pediatric Department, and are supplemented by special interviews and laboratory examinations. Physicians' observations are systematized and made more uniform. Special efforts are made to obtain information on members of study who do not return to the plan for medical care.
Duration: July 1959-indefinite.
Investigator(s): Jacob Yerushalmy, Ph.D., Professor of Biostatistics, University of California, Berkeley; Alexander L. King, M.D., Director of Pediatrics; and Robert W. King, M.D., Consultant, Department of Obstetrics and Gynecology, Kaiser Foundation Hospital, Oakland, Calif. (Reported by C. H. Peckham, M.D., 3783 Piedmont Ave., Oakland, Calif. 94611.)
Cooperating group(s): Division of Biostatistics, School of Public Health, University of California; Permanente Medical Group; Kaiser Foundation Research Institute.
Publication: Yerushalmy, J., "Statistical Considerations and Evaluations of Epidemiological Evidence," in Tobacco and Health, Chas. C. Thomas, publisher, 1962. American Journal of Obstetrics and Gynecology 87:5:609-620, November 1, 1963; 88:4:505-518, February 15, 1964. Vox Sanguinis 8:376-377, May-June 1963; 8:549-556, September-October 1963; 9:502-504, 1964. Human Biology 36:2:86-103, May 1964. Obstetrics and Gynecology 24:5:707-715, November 1964. American Journal of Diseases of Children 109:43-57, January 1965.

21-AA-6 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of approximately 50 normally healthy persons from birth in 1928-29 to the present (39 years).
Subjects: Full-term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above-average group. 100 offspring of these subjects, age range from a few months to about 16 years, seen irregularly, but the same data (appropriate for age) are collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs, and skeletal X-rays taken at most ages. Socio-economic data available. Comparisons now being made on variety of collected data. Studies of physical aspects of children's growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.

Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., Institute of Human Development, University of California, 94720; and Dorothy H. Eichorn, Ph.D., Child Study Center, 2425 Atherton St., Berkeley, Calif. 94704.
Cooperating group(s): Institute of Human Development, University of California.
Publication: Studies in the Development of Young Children, University of California Press, 1940. Growth Diagnosis, University of Chicago Press, 1959. Child Development 12:167-173, 1941; 27:45-74, 1956. American Psychologist 10:805-818, 1955. Monograph, Society for Research in Child Development 28, 1963.

21-AA-7 MEDFORD, OREGON BOYS' GROWTH STUDY

Purpose: To construct cross-sectional, convergence, and longitudinal growth and acceleration curves for maturity indices, structural measures, strength tests and batteries, and motor ability elements; to relate various physical and motor growth factors to skeletal age, somatotype components, nutritional status, socio-personal adjustment, interests, and scholastic aptitude and achievement.
Subjects: Boys, seven to 18 years of age.
Methods: (1) Cross-sectional analyses for boys from 9 through 15 years of age; (2) convergence analyses, based on four-year sequences with each fourth year overlapping, for ages seven through 18 years; (3) longitudinal analyses from seven to 18 years; (4) inter-correlational and factor analyses of all traits for the different ages; (5) trace the development of all traits for boys who become athletes, honor roll students, school and other organization leaders, delinquents, and the like.
Duration: September 1956-May 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor, School of Health, Physical Education and Recreation, University of Oregon, Eugene, Ore.
Cooperating group(s): Athletic Institute (Chicago, Ill.); Medford Public Schools; Curriculum Development Fund, Oregon State Department of Education; and Office of Scientific and Scholarly Affairs, University of Oregon.
Publication: Mimeographed report: "Initial Contributions and Implications of the Medford Boys' Growth Study, 1956 to 1965;" monographs; articles in professional journals.

21-AA-8 PATTERNS OF SOOTHING AND EXCITATION IN NEONATES

Purpose: To investigate the role of excitatory and inhibitory patterns in neonatal development through use of behavioral ratings and heart rate measurements. This research is part of a long-term study of regulatory principles and mechanisms which govern neonatal behavior (see Bulletin 5, Research Relating to Children).
Subjects: Normal, healthy, 2- to 5-day-old full-term babies born at Bronx Municipal Hospital Center.
Methods: Heart rate and behavioral ratings obtained for all experimental sessions. Each neonate tested at three sessions: test, re-test on reactions to a series of soothing stimuli, and one session of trials of excitatory stimuli. Soothing stimuli applied when neonates are aroused are a tone, rocking, sweetened pacifier inserted in babies' mouths, immersion of babies' feet in warm water, and a control period. Each stimulus condition applied three times. Excitatory stimuli applied after feeding when neonates are quiescent are a tone, cold disc applied to the abdomen, and rocking.

Findings: Data analyzed with respect to (1) relationship between heart rate and behavioral ratings; (2) individual differences in overall soothability and in most effective soothing stimuli; (3) test-re-test reliability on successive days; and (4) relationship between excitatory and inhibitory patterns.
Duration: January 1962-continuing.
Investigator(s): Sibylle Escalona, Ph.D., Professor of Psychology; Wagner H. Bridger, M.D., Assistant Professor of Psychiatry; Beverly M. Birns, Ph.D., and Marion Blank, Ph.D., Instructors in Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Yeshiva University, New York, N. Y. 10061.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-AA-9 INSTITUTE FOR CHILD STUDY OF PHILADELPHIA

Purpose: To develop standards and norms of physical growth, specific for children of urban Philadelphia. Longitudinal study based on annual or semi-annual follow-up of more than 2,000 children registered at the Institute.
Methods: School Series: initially based on 600 school children in five schools (now 22 schools), ages 6 to 12, "normal" medically and dentally; data collected on national and ethnic background, socio-economic status of parents, medical and dental health history of child, height and weight of parents and siblings, anthropometric measurements and X-rays. American Negro Series: 150 Negro children with normal occlusion selected for study with a view to establishing tentative standards of facial growth. Pilot Study Series: extensive study of 75 children, 6 to 8 years of age, seen every three months for measurements, X-rays, dietetic histories, careful medical examination data, blood chemistry, oral pathology data, etc. Orthodontic Series: all children accepted by Orthodontic Clinic had lateral and postero-anterior head films taken and detailed measurements of head and face made. Orthodontic Treatment Series: a small pilot study of 15 white boys, ages 11 to 15, with a certain type of malocclusion accompanied by V-shaped, high-vaulted palate; 15 with identical orthodontic condition; 15 with normal occlusion--first group to receive free orthodontic care, second and third groups to receive free dental care but no orthodontic treatment. Cleft Palate Series: growth pattern of 250 children with cleft lip and/or palate. Cooley's Anemia Series: family-line investigation of 25 children for traits other than the disease such as faciodental growth dysplasia. Endocrine Series: evaluation of degree of growth deviation with follow-up to study effect of endocrine therapy upon growth pattern. Behavioral Series: 110 first, second, and third graders rated in terms of physical growth progress and simultaneously in terms of grades, emotional stability, and other aspects of classroom behavior to see if there is any real correlation.
Duration: 1947-1967.
Investigator(s): Wilton M. Krogman, Director, Philadelphia Center for Research in Child Growth; and F. E. Johnston, Ph.D., Assistant Professor of Anthropology, University of Pennsylvania, Philadelphia, Pa.
Cooperating group(s): Institute for Child Study of Philadelphia (sponsored by Graduate School of Medicine and Evans Institute of Dentistry of University of Pennsylvania and Children's Hospital of Philadelphia); Philadelphia Department of Public Health; Philadelphia Board of Public Education; Public Health Service, U. S. Department of Health, Education, and Welfare.

21-AA-10 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns *of all* children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Co-chairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto, Calif.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publication: *Journal of Clinical Endocrinology and Metabolism* 22:1127-1129, November 1962; *Journal of Pediatrics* 62:5:631-645, May 1963.

21-AA-11 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Head, Child Study Clinic, University of Oregon Dental School, 611 S.W. Campus Dr., Portland, Ore. 97201.
Cooperating group(s): University of Oregon Dental School; Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Radiology*, April 1961; July 1962. *Journal of Dental Research*, July-August 1961; July-August 1962. *Human Biology*, February and September 1962.

21-AA-12 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Subjects: 4,483 Cleveland children; 134 Boston children; and a sample of Detroit children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions or initial standards are prepared as needed to provide standards of reference.

Duration: 1948-1966.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University, Cleveland, Ohio; and William Walter Greulich, Ph.D., National Institute of Child Health and Human Development, Bethesda, Md. 20014.
Cooperating group(s): Bolton Study (Cleveland); Department of Maternal and Child Health, Harvard University School of Public Health.
Publication: Current standards: Radiographic Atlas of Skeletal Development of Elbow and Shoulder; Radiographic Atlas of Skeletal Development of Hip. The latest standard for the hand was published in 1959; foot in 1962; and knee in 1955.

21-AA-13 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from 15 collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956.
Investigator(s): Richard L. Masland, M.D., Coordinator of Project, National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. Collaborating institutions: Children's Hospital, San Francisco, Calif.; Yale University School of Medicine, New Haven, Conn.; Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Ore.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publication: Johns Hopkins Magazine, June 1959; Summary of Progress in Collaborative Perinatal Research (A Nationwide Mother-Child Study), Public Health Service Research Profile No. 9, PHSP No. 1161, 1964.

21-AA-14 **METHODS IN CHARACTER DEVELOPMENT**

Purpose: To develop more effective methods in character development in cooperation with character training agencies.
Subjects: Children and families in about 30 participating church schools and other groups widely spread in the United States.
Methods: Experimental use of curriculum by participants. Reports of experimental efforts analyzed and curriculum revised on basis of findings. Methods of character education then developed and reported. Emphasis is on character growth in children.
Findings: Anticipate development of instructions for writing character building curricula. These will include types of homes, children, and classes for character development and descriptions of age-level potentials for children.
Initiation date: 1936.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Character Research Project, Union College and University, Schenectady, N. Y.
Cooperating group(s): Lilly Endowment, Inc.
Publication: Published in Union College Studies in Character Research. Also Dimensions of Character, Macmillan, 1956.

GROWTH AND DEVELOPMENT

General

21-BA-1 PERINATAL STRESS AND PREMATURITY

Purpose: To compare subsequent psychological, neurological, and adaptive development through the first six years of life with documented biochemical alterations obtained during first week of life on two groups of prematurely born infants.
Subjects: Approximately 200 prematures born at University of Arkansas Medical Center during the past six years and studied in the premature nursery.
Methods: Subjects were divided into two groups, one fed beginning at six hours of age, and the other withheld from all feedings until 72 hours of age. Biochemical data were obtained on the infants during the first 72 hours of life (see reference below). Follow-up evaluations include a pediatric, psychological, speech and hearing, and neurological examination, including an electroencephalogram. These are done as close as possible to the second, third, fourth, and sixth years of age, respectively.
Duration: February 1966-January 1970.
Investigator(s): John H. Bornhofen, M.D., Assistant Professor of Pediatrics, University of Arkansas Medical Center, Little Rock, Ark. 72201.
Cooperating group(s): Arkansas Children's Hearing and Speech Center, Arkansas State Department of Health; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Pediatrics 63:3:361-385, September 1963.

21-BA-2 STUDIES ON VISION AND LEARNING IN THE NEWBORN

Purpose: Two lines of work have been followed: to investigate visual fixation; to show how sucking varies with the nature of the stimulus put in the child's mouth and with the feeding experience the child has had.
Subjects: About 120 newborn, term babies.
Methods: A variety of methods are being used, including a pressure transducer to show both suction (negative pressure) and expression. Measures are also made of heart rate and activity. Changes in these measures are examined for the first four days of life in breast-fed and bottle-fed babies, in nutritive and non-nutritive sucking, and, most recently, when the sucking signals are used to trigger a pump which delivers milk to the child.
Findings: Breast-fed babies suck more slowly than bottle-fed babies; the nature of the stimulus put in the mouth controls the sucking rate; and the characteristics of nutritive and non-nutritive feeding are different.
Duration: 1965-1968.
Investigator(s): Dugal Campbell, Ph.D., Associate Professor, and Judith Allan, M.A., Research Assistant, Department of Psychology, Queen's University, Kingston, Ontario, Canada.
Cooperating group(s): Department of Paediatrics, Queen's University, Kingston, Ontario; Association for Aid to Crippled Children; Ontario Mental Health Foundation.
Publication: Published in Ph.D. thesis form.

21-BA-3 **AN INVESTIGATION OF THE PERCEPTUAL-MOTOR AND AFFECTIVE SEQUELAE OF PERINATAL ANOXIA AS VIEWED WITHIN THE CONTEXT OF PIAGET'S DEVELOPMENTAL PSYCHOLOGY**

Purpose: To test hypothesis that a child possessed of less than normally efficient sensory and motor systems, as presumably would be the case for an anoxic infant, will arrive at a deviant construction of reality. This would be correlated with aberrant affective relationships, particularly within the context of the early mother-child interaction. Hypothesis follows Piaget's contention that reality is constructed out of child's actions vis-à-vis his environment and his perceptions of the consequences of such action.
Subjects: 10 anoxic and 10 non-anoxic full-term infants who have not been mechanically traumatized. Groups are composed of five male and five female subjects.
Methods: Child's interaction with his environment is explored within context of the genesis of visually directed prehension. All infants are tested at one month of age and at monthly intervals thereafter through seven months. At each testing session infant is placed in supine position, and a red plastic ring is suspended above his head. Infant's manner of approach to the ring is recorded on film and subsequently analyzed in terms of Piaget's description of the sensory motor period of development. Following the red ring test, the infant's reactions to such interpersonal situations as the disappearance of the examiner's versus the mother's face, the experimenter's versus the mother's smile, and the experimenter's versus the mother's vocalizations are noted.
Duration: June 1966-February 1967.
Investigator(s): Donald S. Leventhal, Ph.D., Associate in Medical Psychology, Duke University Medical Center, Durham, N. C. 27706.
Cooperating group(s): Council on Research and the Educational Improvement Program, Duke University; Ford Foundation.

21-BA-4 SOME SEX DIFFERENCES IN THE BEHAVIOR OF NEWBORN INFANTS

Purpose: To determine behavior differences with regard to method of feeding and sex.
Subjects: Breast-fed and bottle-fed boys and girls.
Methods: Infants are compared with regard to differences in reflex activity, hand-face contacting, and capacity for maintaining a given level of alertness or sleep before and after feeding.
Findings: Preliminary sample showed that behavior differs with regard to method of feeding and also with regard to sex. Boys seem to be more vigorous in terms of hand-face contact, but girls are more successful in contacting the snout area with the hand and apparently can maintain the state of alert attentiveness for longer periods of time in first four days of life.
Duration: June 1964-September 1966.
Investigator(s): Justin D. Call, M.D., Department of Psychiatry; and Tom Trott; Catherine Wechsler; and Ross Frank, Medical Students, University of California Medical Center, Los Angeles, Calif. 90024.
Publication: Preliminary report, UCLA Medical Faculty Society, February 1965.

21-BA-5 CHILDHOOD HEALTH, ACADEMIC AND SOCIAL CHARACTERISTICS AS INDICATORS OF FITNESS FOR MILITARY SERVICE

Purpose: Inasmuch as one in three young men examined by Selective Service is currently being rejected for physical, psychological, or mental (trainability) reasons, the study aims to find good predictors of a poor future health status, including successful adult functioning, from childhood evidence, and to suggest from these findings areas in the school health program to which more (or less) attention might be devoted.
Subjects: Representative group of about 5,000 boys drawn from eighth and ninth graders in the public schools of New York City during the period 1953-56.
Methods: A random sampling of 17 schools terminating in grade eight or nine was taken (with three strata, using ethnic proportions to define them) and entire registers of boys over a three-year period centering about 1954-55 (grade eight or nine) copied. Cumulative record folders were then traced to the senior high schools. A team of abstractors using a printed form abstracted all relevant information on academic, psychological, and health characteristics noted in records prior to grade 10. Names of these boys were submitted to the New York City Selective Service System to obtain their draft classification status. Data were coded, punched on IBM cards, and tables produced by computer.
Duration: July 1965-June 1967.
Investigator(s): Paul M. Densen, Sc.D., Deputy Commissioner, New York City Health Department; and Doris B. Ullman, M.S., Medical and Health Research Association of New York City, Inc., 125 Worth St., New York, N. Y. 10013.
Cooperating group(s): New York City Board of Education; New York City Selective Service System headquarters; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A final report will be submitted to the Public Health Service in June 1967. Portions will probably be published in the *Journal of the American Public Health Association* within the next year.

21-BA-6 ADOLESCENT IMMATURITIES

Purpose: To integrate the developmental tempo in the physical, mental, emotional, sexual, and social components of the total being towards effective maturation.
Subjects: Adolescent clinic patients.
Methods: Longitudinal studies are being made in each of these developmental phases of maturation in order to determine the individual deviations and evolve a clinical method for controlling maturities in all aspects of life at the same relative level to achieve optimal development for optimal functioning for optimal maturation.
Duration: 1950-1968.
Investigator(s): I. Newton Kugelmass, M.D., Ph.D., Consultant, Departments of Health and Hospitals, 1060 Park Ave., New York, N. Y. 10028.
Cooperating group(s): Adolescent clinics in New York City and suburban institutions.
Publication: *Complete Child Care in Body and Mind*. New York: Twayne Publishers, Inc.; *Biochemistry of Blood in Health and Disease*. Springfield, Ill.: Charles C. Thomas; others.

Physical

21-CA-1 A SEARCH FOR LATERAL DOMINANCE IN THE NEWBORN

Purpose: To determine if there is evidence of lateral dominance in the newborn that may be one indication of a degree of central nervous system maturation that would be an important variable to evaluate in observing and interpreting the infant's early experiences with the external environment.
Subjects: Infants in a newborn nursery.
Methods: Infants are examined for direction of lateral head rotation, relative frequency of hand-mouth (snout-peri-snout) contact, and intensity of rooting reflex.
Findings: Right lateral rotation and hand-face contact appear to be predominant, with no appreciable differences between the two sexes.
Duration: September 1965-indefinite.
Investigator(s): Coy E. Swanson, M.D., Chief, Children's Service, Sacramento County Hospital Mental Health Services, Sacramento; and Justin D. Call, M.D., Department of Psychiatry, University of California Medical Center, Los Angeles, Calif. 90024.
Publication: Data and results available from either investigator.

21-CA-2 ON THE DEVELOPMENT OF HUNGER AS A SPECIFIC STATE IN THE NEWBORN INFANT

Purpose: To determine whether or not certain behaviors vary in accordance with the infant's having been fed or not or in accordance with the infant's level of sleep or attentiveness.
Subjects: Newborn infants.
Methods: Rooting reflex, hand-mouth reflex, and sucking response, together with hand-face contacting and state changes, are being studied.
Findings: Preliminary data suggest that feeding does influence these behaviors significantly and independently of the state changes.
Duration: Not reported.
Investigator(s): Justin D. Call, M.D., Department of Psychiatry; and Tom Trott; Catherine Wechsler; and Ross Frank, Medical Students, University of California Medical Center, Los Angeles, Calif. 90024.

21-CC-1 DO-IT-YOURSELF VISION SCREENING PROJECT AMONG THREE-AND-ONE-HALF-YEAR-OLD CHILDREN

Purpose: To determine if parents can accurately screen their own three-and-one-half-year-old children at home when provided with a simple screening device, and to determine if a sufficient number of mothers are willing to carry out the screening to justify such a do-it-yourself program on a continuing basis.
Subjects: 1,000 parents of three-and-one-half-year-old children based on birth certificate information.
Methods: A screening kit was developed which is sent with instructions for the screening and a questionnaire to determine if parents had any difficulty, what the results were, and how they felt about being given the opportunity to screen their own child. Of the 1,000 children 300 will be re-checked by a trained nurse to learn how many apparent vision problems

were missed by the parents who indicated their child had no vision problem. The nurses' findings will have to be confirmed by a professional eye examination.
Findings: The instructions had to be revised and simplified. The average returns among three-and-one-half-year-olds has averaged 57 percent with the help of telephone calls to those not returning the results after four weeks. Parents generally feel three-and-one-half is too young. Consequently, the same material was mailed to parents of children between four and four-and-one-half, which resulted in a 51 percent response in 30 days without any phone calls. The number of vision problems identified during the first three months is too small for evaluation.
Duration: July 1966-June 1968.
Investigator(s): John A. Bacharach, M.P.H., Director, Eau Claire City County Health Department, 414 E. Grand Ave., Eau Claire, Wis. 43701.
Cooperating group(s): Local Lions Club; Public Health Service, U. S. Department of Health, Education, and Welfare.

21-CC-2 A STUDY OF EVOKED POTENTIALS TO AUDITORY STIMULI IN HANDICAPPED CHILDREN

Purpose: To study specific characteristics of evoked potentials to auditory stimuli in normal children, and to apply this information in determining auditory thresholds of deaf, hard of hearing, blind, mentally retarded, and brain-damaged children; also, to concurrently study the function of the auditory nervous system in an effort to contribute information on auditory theory and pathology.
Subjects: Normal and handicapped children, ages six months to six years.
Methods: Electrodes attached to the scalp pick up evoked electrical potentials to auditory stimuli. Potentials are amplified and then extricated from random brain noise through use of a summing computer. Thus, the "average response" can be plotted in the absence of unrelated "brain noise."
Findings: Procedure is reasonably successful with normal hearing subjects.
Duration: January 1966-December 1968.
Investigator(s): Paul Skinner, Ph.D., Associate Professor, Speech Department, University of Arizona, Tucson, Ariz. 85721.
Cooperating group(s): Easter Seal Research Foundation; Tektronix Research Foundation; National Science Foundation.

21-CC-3 EVOKED AUDITORY RESPONSES IN CHILDREN

Purpose: To assess the use of a summing computer as a method of objectively measuring auditory sensitivity in children and in others who are unwilling and unable to give voluntary responses.
Subjects: 105 children, ages 3 days to 11 years; 128 adults.
Methods: Evoked response measures from the intact scalp were fed into a summing computer. The stimuli were bursts of tones fed into the ear by earphones. The ongoing activity of the plan was averaged out, and the average evoked response was recorded. Stimulus intensity was lowered until no responses could be seen, representing the evoked response threshold to auditory stimulus.
Findings: Evoked response measures are easily obtained in older children and in adults. They tend to be most obscure in children below age two, but can be elicited in approximately 80 percent of the cases. This technique is an important adjunct to conventional audiometric techniques.
Duration: January 1965-July 1966. (Formal termination, but project will continue for at least four years).

Investigator(s): Geary A. McCandless, Ph.D., Assistant Professor and Head, Section of Audiology and Speech Pathology, University of Colorado School of Medicine, Medical Center, 4200 E. Ninth Ave., Denver, Colo. 80220.
Cooperating group(s): National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Speech and Hearing Research, in press.

21-CC-4 BODY IMAGE IN PERCEPTUALLY HANDICAPPED CHILDREN

Purpose: To study changes, if any, in body image of perceptually handicapped children who have undergone perceptual re-training.
Subjects: 50 children, ages 5 to 11, who have been found deficient in visual and auditory perceptual functioning.
Methods: Each child will be tested for perceptual deficits by Frostig and Illinois Test for Psycholinguistic Abilities. DAP and Rorschach will also be administered. Perceptual ages will be scored. Barrier scores by the method of Fisher and Cleveland will be obtained from Rorschach records. DAP will be scored for changes.
Findings: In a pilot study, children with perceptual handicaps showed deviations in their barrier scores prior to re-training. Re-testing is now in progress.
Duration: Fall 1965-Fall 1966.
Investigator(s): Irvin A. Kraft, M.D., Associate Professor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Medical Director, Texas Institute of Child Psychiatry, Houston, Tex. 77025.

21-CC-5 A STUDY OF THE INCIDENCE OF VISUAL PERCEPTUAL DISORDERS IN HIGH-ACHIEVING CHILDREN

Purpose: To study the incidence of visual perceptual disorders in high-achieving children.
Subjects: 70 children in a private school in the high first and middle second grades, who are rated as high-achieving readers.
Methods: Each child in the first and second grades is rated by the head of the lower school as to his achievement level in reading. Subjects are tested with the Marianne Frostig Test for Visual Perceptual Development (1963 standardization) and their perceptual ages are derived. These scores are then compared with early classroom adjustment and achievement level.
Findings: Even in some high-achieving children there appear to be certain areas of perceptual development which are not consistent with the child's earliest educational feats. Some children were discovered who displayed deficits in perception while still achieving above their age level. These results lead to the possibility that some children have learned to compensate for visual perceptual deficits, and have overcome what is normally an educational "handicap."
Duration: December 1965-June 1966.
Investigator(s): Irvin A. Kraft, M.D., Associate Professor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Medical Director, Texas Institute of Child Psychiatry; John Crow, M.D. Candidate, Baylor University College of Medicine; and Lois Buck, B.A., Graduate Student in Special Education, University of Houston, Houston, Tex. 77025.

21-CC-6 ASSESSMENT OF VISUAL PERCEPTUAL LIMITATIONS IN YOUNG CHILDREN

Purpose: To test hypothesis that children deficient in their visual perception of forms have atypical exploratory movements of the eyes during observation of forms.
Methods: Visual perceptual test items involving forms will be graded in complexity. This will involve developing items that vary in figure, and ground, line, and form complexity. Child's eye movements will be recorded while child is observing these materials. Attempts will be made to identify the pattern of eye movements that accompany accurate versus inaccurate observation of the sets of perceptual materials presented. Data will also be analyzed to test if certain eye movements are necessary for perception of forms at different levels of complexity.
Duration: 1966-1969.
Investigator(s): Peter F. Briggs, Ph.D., Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center, Minneapolis, Minn. 55455. (Reported by Frederic J. Kottke, M.D., Professor and Head, Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center.)

21-CC-7 A STUDY OF VISUAL PERCEPTIONS AS RELATED TO CULTURAL DEPRIVATION

Purpose: To investigate the role of perceptions in pre-school children as related to cultural deprivation; to try to determine the type of program most effective for remedying perceptual difficulties.
Subjects: Three-, four-, and five-year-old children in regular nursery school, and children of the same age who are in the program for the disadvantaged, the latter group consisting of children from different cultures, including the Indian (Zuni, Navajo, and Laguna).
Methods: The Frostig Visual Perception Test is administered in small groups to the disadvantaged and to those in the regular nursery.
Findings: The perceptions of the child in the program for the disadvantaged differ from those of the child in the regular nursery school.
Duration: January 1967-1970.
Investigator(s): Dr. David Dennis, Director of Research, and Adelaide Glaser, Head, Department of Home Economics, and Director, Child Development Center, Western New Mexico University, Silver City, N. M. 88061.

21-CC-8 LATERALITY OF SENSORY AND MOTOR FUNCTIONS IN MAN

Purpose: To investigate several aspects of laterality in man; to determine the mechanism(s) subserving lateral organization; and to integrate these findings toward a theory of laterality that might be applicable to developmental problems in children. Particular emphasis will be addressed to the determinants of handedness and its relationship to speech-brain laterality.
Subjects: Normals, both children and adults, without evidence of brain pathology; also identical twins.
Methods: Test procedures involve application of new techniques of simultaneous stimulation in vision, audition, and somesthesis. Disparate messages are presented in pairs simultaneously at very rapid rates in each modality. Response variables are based upon recall or recognition of these messages. Visual experiments involve both monocular and visual field stimulation in which crossed and uncrossed pathways are put into competition. Manual laterality is determined by application of performance tests and analyzed by multivariate analysis.

Duration: February 1966-January 1969.
Investigator(s): Paul Satz, Ph.D., Assistant Professor, Department of Clinical Psychology, University of Florida, Gainesville, Fla. 32601.
Cooperating group(s): Florida Council for Research and Training in Mental Health; Center for Neurobiological Sciences, and Department of Neurosurgery, University of Florida; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Neurology, Neurosurgery and Psychiatry, and Neuropsychologia, in press.

21-CC-9 LANGUAGE AND HEARING OF EIGHT-YEAR-OLD CHILDREN

Purpose: To develop an instrument to measure speech, language, and hearing in eight-year-old children; to compare eight-year-old performance with three-year-old performance measures obtained on the same children; to compare eight-year-old measures of speech, language, and hearing with medical history including pregnancy and delivery data, and with periodic medical and psychological examination data.
Subjects: Eight-year-old children previously tested in the areas of speech, language, and hearing at age three.
Methods: A tentative instrument is first evaluated by a panel of consultants. Pre-testing follows. Eventually, findings will be compared at three and eight years.
Duration: 1965-1970.
Investigator(s): Frank M. Lassman, Ph.D., Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center, Minneapolis, Minn. 55455. (Reported by Frederic J. Kottke, M.D., Professor and Head, Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center.)

21-CC-10 PRE-READING: IMPROVEMENT OF VISUAL-MOTOR SKILLS

Purpose: To evaluate the use of an arbitrarily determined sequence of learning activities for improving visual-motor skills of kindergarten subjects.
Subjects: Kindergarten pupils with I.Q. of 80 to 120, C.A. of 60 to 74 months, no evidence of hearing impairments or visual inefficiencies according to school records, ability to discriminate primary colors, freedom from gross organicity, and ability to speak English fluently.
Methods: Subjects were divided into a control group of 27 and an experimental group of 28 and given the Visual-Motor Test and the Betts Word-Form Test. The control group received the regular kindergarten program, while the experimental group received the regular kindergarten program plus differentiated teaching of visual-motor skills. Post-testing included the re-administration of the Visual-Motor Test and the Betts Word-Form Test. Performance of both groups was statistically evaluated by an analysis of covariance in which adjustment was made for initial differences in Visual-Motor Test I, Betts Word-Form Test I, and mental age.
Findings: The ability of kindergarten pupils to reproduce selected geometric figures is amenable to training; word discrimination ability, in turn, is improved by training in the reproduction of selected geometric figures.
Duration: 1967.
Investigator(s): Mary H. Bosworth, Ed.D. Candidate, Reading Research Laboratory, School of Education, University of Miami, Coral Gables, Fla. 33124. (Reported by Emmett A. Betts, Ph.D., Research Professor, School of Education, University of Miami.)
Publication: To be published by Winter Haven Lions Research Foundation, 1967.

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21-CC-11 ANALYTIC STUDIES OF VISUAL PERCEPTION

Purpose: To investigate (1) the magnitude of the Poggendorff illusion as a function of age; (2) the effect of stimulus distance and age on shape matching; (3) monocular and binocular size matching as a function of distance at various age levels; and (4) the relation between age and the magnitude of the Ponzo illusion.
Subjects: Children and adults, ranging in age from 5 to 88, some of normal intelligence and others mentally defective but with normal vision.
Findings: (1) The magnitude of the Poggendorff illusion decreases with age from 5 to approximately 10 years, after which it remains stable into old age, and the illusion is greater among feeble-minded observers independent of chronological age; (2) at three feet, shape constancy was inversely related to age, while at 15 feet, constancy was minimal at all ages; (3) loss of binocular cues is critical only under conditions where size constancy is incomplete or marginal; and (4) the Ponzo illusion increases rapidly up to about age 13, after which it remains stable through age 50, and, for older subjects tested, the magnitude of the illusion decreased markedly.
Duration: 1963-1969.
Investigator(s): Herschel W. Leibowitz, Ph.D., Professor of Psychology, The Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Child Development and American Journal of Psychology, in press, 1967; Journal of Experimental Psychology, June 1967.

21-CC-12 VISUAL-MOTOR SKILLS: RESPONSE CHARACTERISTICS AND PRE-READING BEHAVIOR

Purpose: To study assumed facets of visual-motor skills and the relationship between achievement in these skills and a measure of visual-perception reading readiness.
Subjects: 58 kindergarten pupils of normal intelligence.
Methods: A test of finger agnosia, the Lorge-Thorndike Intelligence Test, Level 1, Form A, and the Word-Form Test of the Betts Ready-to-Read Tests, V-2, were administered individually, with considerations for test interaction and practice effects, and data were analyzed.
Findings: The relationship between kindergarten subjects' concepts of geometric forms and their ability to copy them was not significant; the subjects' scores for copying geometric forms ranged from no response distortions to inability to reproduce the form. Their highest achievement was with the vertical cross and the lowest, with the divided rectangle; additional findings.
Duration: 1967.
Investigator(s): Katherine DiMeo, Ph.D. Candidate, Reading Research Laboratory, School of Education, University of Miami, Coral Gables, Fla. 33124. (Reported by Emmett A. Betts, Ph.D., Research Professor, School of Education, University of Miami.)
Publication: To be published by Winter Haven Lions Research Foundation, 1967.

21-CC-13 RELATIONSHIP BETWEEN INTELLIGENCE AND THE VISUAL EVOKED RESPONSE

Purpose: To evaluate the relationship between intelligence and cortical responses evoked by visual stimuli; to see how this relationship varies as a function of sex and stimulus intensity.

Subjects: Two experimental groups of 10- to 11-year-old children matched for sex: an intellectually superior group (I.Q.'s of 125 to 140 on WISC scale), and an intellectually retarded group (I.Q.'s of 60 to 75 on WISC scale), all without known organic deterioration.
Methods: Children are evaluated neurologically and psychologically. "Averaged" evoked response to a stimulus, a precise measure of cerebral electrical activity, is taken. Electrical changes at the cortex and other areas of the brain initiated by a stimulus such as a pulse of light, a shock, or a click are minute and in most cases are lost in the background activity of the EEG tracings. New electronic computers enable researchers to sum these minute responses so that they emerge from the background "noise" of the brain as an identifiable pattern.
Duration: 1966-1967.
Investigator(s): Lee Rhodes (Ph.D. Candidate), Clinical Psychology Trainee; Edward C. Beck, Ph.D., Director, Neuropsychology Laboratory; and Robert E. Dustman, Ph.D., Research Associate, Veterans Administration Hospital, Salt Lake City, Utah 84113.
Publication: Final report planned.

21-CC-14 VISUAL AND SOMATOSENSORY EVOKED RESPONSES OF MONGOLOID AND NORMAL CHILDREN

Purpose: To compare the evoked potentials of mongoloid, undifferentiated mental defective, and normal children, for consistent differences in wave form, latency, and amplitude, and to study their somatosensory and visual responses.
Subjects: 25 mongoloid younsters, ages 9 to 15; 15 undifferentiated mentally deficient youngsters, ages 10 to 16; and a control group of 15 normal youngsters. Both experimental groups were selected from a day school program for mentally handicapped children; the control group was selected from the public schools.
Methods: Each subject is seated in a padded chair in a darkened room as free from extraneous stimuli as possible. Scalp electrodes are attached and ear-ground reference leads used. The electrical brain activity of the subjects is amplified, recorded, and stored on a tape recorder. The flash evoked responses from the four brain areas are averaged by computer and plotted graphically for quantification and statistical evaluation. The plotted evoked responses are measured and analyzed to determine if the groups can be differentiated on the basis of Visual Evoked Responses (EVP) wave latencies and amplitudes or EVP configuration.
Investigator(s): Hugh B. Bigum (Ph.D. Candidate), Counseling Psychology Trainee; Edward C. Beck, Ph.D., Director, Neuropsychology Laboratory; and Robert E. Dustman, Ph.D., Research Associate, Veterans Administration Hospital, Salt Lake City, Utah 84113.
Publication: Final report planned.

21-CC-15 SENSORY STIMULATION, CONDITIONING, AND AROUSAL IN INFANCY

Purpose: To discover modality differences in conditioned stimuli when conditioning autonomic (e.g., pupillary response to light) and somatic (e.g., eyeblink) responses in infants; to relate current neurological theories to behavioral measures of sensory capabilities and reflexive capacities of infants, and to determine effects of various "states" or arousal on these variables as well as on overt behaviors such as crying.
Subjects: Normal infants, four to eight weeks of age, sampled from residence nurseries and private homes.

Methods: Using as Conditioned Stimulus (CS) sound, time, and time plus sound, and varying in addition the CS-UCS onset-interval, pupillary dilation or constriction is elicited by a light UCS. Infrared film in a 16mm motion picture camera allows continuous recording of the pupillary response. Nine test trials (absence of the UCS) randomly intermixed with conditioning trials reveal the presence of the CR. Projected negative images of subject's eye allow measurement which is electronically converted to original pupil diameter. Auditory, visual, temperature, and proprioceptive stimuli in combinations are presented to infants. Various physiological and behavioral measures of arousal level are taken to discover greatest quieting effects.
Findings: Infants condition to time or time plus sound as a CS but not to sound with the pupillary response. Different inter-stimulus intervals have no effect on this finding. Infants with eyeblink response do condition to sound but not to time as the CS.
Duration: February 1966-February 1968.
Investigator(s): Yvonne Brackbill, Ph.D., Professor of Psychology, and Larry M. Lintz, Ph.D. Candidate, U. S. Public Health Service Trainee, Department of Psychology, University of Denver, Denver, Colo. 80210.
Cooperating group(s): National Science Foundation.
Publication: *Journal of Experimental Child Psychology* 4:276-279, 1966; *Perceptual and Motor Skills* and *Psychonomic Science*, in press, 1967.

21-CD-1 EEG SLEEP PATTERNS OF THE TWO-YEAR-OLD

Purpose: To evaluate extent and nature of sleep disturbances in the infant.
Subjects: 16 two-year-old infants.
Methods: Subjects are studied for four consecutive nights using the electroencephalogram and electrooculogram. These records will be scored for four stages of sleep and for the dream stage (1-REM). Data will then be tabulated for each subject to give a picture of individual infant sleep patterns and analyzed across subjects to display patterns typical of the infant two-year-old.
Duration: Not reported-June 1967.
Investigator(s): R. Dean Coddington, M.D., Associate Professor of Psychiatry, and William C. Kohler, M.D. Candidate, J. Hillis Miller Health Center, University of Florida, Gainesville, Fla. 32601.

21-CG-1 AN INVESTIGATION OF MOTOR SKILLS IN CHILDREN WITH LANGUAGE DISORDERS

Purpose: To determine specific types of motor problems associated with language disordered children.
Subjects: Language disordered children, ages four to nine, who demonstrate no medically recognized orthopedic problems.
Methods: Administration of extensive language and motor batteries to determine specific language and motor disorders or delayed developmental patterns.
Findings: General findings indicate fairly consistent difficulties in balance, agility, body posture, and ballistic movements in pilot group studies.
Duration: September 1965-January 1968.
Investigator(s): Jean R. Boudreaux, Ph.D., Associate Professor, Speech Department, University of Arizona, Tucson, Ariz. 85721. (Reported by David L. Patrick, Coordinator of Research, University of Arizona.)

21-CH-1 EFFECTS OF REWARD AND PUNISHMENT ON STUTTERING IN CHILDREN

Purpose: To study hesitation behavior in children as a function of verbal reward and punishment. Specifically, to test hypotheses that (1) more hesitation occurs under the condition of punishment than reward, and (2) effects of punishment are greater in younger than older children, and in boys than girls.
Subjects: 160 third and sixth grade children from three schools.
Methods: Subjects were screened for normal articulation, fluency, and hearing, and evaluated for satisfactory emotional adjustment via teacher report and school records. Twenty boys and twenty girls at each grade level were assigned randomly to each of two treatment groups (80 percent reward/20 percent punishment and vice versa). Pre-recorded tri-syllabic nonsense words of English CVCVCV combinations and stress pattern were presented free-field at a comfortable listening level. Reward (good, right, mm-hmm) or punishment (no, wrong, huh-uh) was delivered after each pronunciation by live voice in a factual manner on a pre-determined basis. Subject responses were tape recorded. Graphic level recordings of control and experimental items are being analyzed for latency and utterance duration. Relevant statistical analyses will be performed.
Duration: July 1965-June 1966.
Investigator(s): Paul J. Jensen, Ph.D., Research Assistant Professor, Communication Sciences Laboratory, Department of Speech, University of Florida, Gainesville, Fla. 32601.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-CH-2 A STUDY OF VOICING IN THE STOPS FOUND IN THE PRE-LINGUISTIC BABBLINGS OF INFANTS

Purpose: To study the acquisition of the phonological system in the vocalizations of infants with/normal hearing.
Subjects: Three males and three females, ages 10 and 12 months, from American English-speaking families.
Methods: Mother and child were brought to a laboratory, and the mother was instructed to interact verbally with the child in her usual manner. She was cautioned not to talk while the child was vocalizing. One or two 25-minute recording sessions were made for each visit to the laboratory, and tape recordings were analyzed. Wide-band spectrograms were made and Voice Onset Time measurements were taken directly from the spectrograms.
Findings: Something approaching the middle category on the VOT continuum is the first to emerge in infant vocalizations. Also, it appears that a child may learn to produce stops with long voicing lead before he learns to produce stops with long voicing lag.
Duration: Not reported.
Investigator(s): Malcolm S. Preston, Psychologist, Haskins Laboratories, 305 E. 43rd St., New York, N. Y. 10017; and Neurocommunications Laboratory, School of Medicine, Johns Hopkins University, Baltimore, Md. (Reported by Franklin S. Cooper, President, Haskins Laboratories.)
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

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21-DA-1 A STUDY OF SELECTED COGNITIVE AND AFFECTIVE VARIABLES FUNCTIONING IN TWO SUB-GROUPS OF LOWER ECONOMIC CLASS FIFTH AND SIXTH GRADE PUPILS IN A NON-METROPOLITAN AREA

Purpose: To investigate possible differences between upper and lower economic class pupils on variables of intelligence, achievement, school attitudes, self-concept, sociometric status, and teacher preference for student; to investigate possible differences on specified variables between pupils from two sub-groups of the lower economic class.
Subjects: 393 fifth and sixth grade pupils from 20 classrooms in three school districts in southern Illinois.
Methods: Data were gathered from school records, interviews with school personnel, and administration of standardized and non-standardized tests and scales. Data were analyzed by analysis of variance (covariance for the achievement variables) to determine if significant differences existed among the three economic groups when studied as a total population, as a female sub-population, as a male sub-population, as a Caucasian sub-population, and as a Negro sub-population.
Findings: Although differences on the variables were found between sub-groups of the lower economic class, none was significant. Between lower and upper economic class students significant differences were obtained, but only on the intelligence variable was a consistent pattern attained--vocabulary achievement was significant when controlled for intelligence; arithmetic and reading were non-significant.
Duration: February 1965-May 1966.
Investigator(s): Burton Crosswait, Ph.D., Assistant Professor, Southeastern State College, Durant, Okla. 74701.
Publication: Doctoral dissertation available on microfilm from University of Michigan, Ann Arbor, Michigan, or by inter-library loan from Southern Illinois University, Carbondale, Illinois. Publication planned in near future.

21-DA-2 METHOD FOR ASSESSING INFANT ENVIRONMENTAL STIMULATION

Purpose: To establish a methodology for observing and recording environmental stimulation and the behavior of nine- and twelve-month-old infants, and to observe a group of infants of this age for an estimate of sex and sibling order differences within each group. This research will lead to a description of the range and variability of environmental stimulation in the average home, thus permitting later comparisons with homes varying in socio-economic level, number of other children in the home, etc.
Subjects: Nine- and twelve-month-old infants.
Methods: On the basis of observations of nine- and twelve-month-old infants in their own homes, a checklist of caretaker and infant behaviors devised by Rheingold (1960) will be modified. To establish interrater reliability, both principal investigator and research assistant will observe a small group of infants and record caretaking and infant behaviors. Each will then separately collect data on nine- and twelve-month-old infants, each group composed of equal numbers of male, female, first and second born infants.
Duration: Not reported-December 1966.

Investigator(s): Marilyn T. Erickson, Assistant Professor of Psychology, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-DA-3 ENVIRONMENTAL STIMULATION AND INTELLECTUAL DEVELOPMENT OF MEXICAN-AMERICAN CHILDREN: AN EXPLORATORY PROJECT

Purpose: To identify environmental variables which are related to the development of intellectual and linguistic skills in Mexican-American children.
Subjects: 80 six-year-old Mexican-American children who indicate high and low potential for school success.
Methods: Home environments of these children were investigated through home interviews and observations. A descriptive analysis of the interview protocols provided an outline of recurring patterns of behavior and attitudes among families of the contrasting groups of children, and the kinds of environmental experiences available to these children were delineated. Interview data were also quantified through use of rating scales which were used in judging 33 characteristics of the environments. Environmental data for the two groups were compared for similarities and differences, and the hypothesis of no difference between environments of the two groups was tested.
Duration: February-September 1966.
Investigator(s): Ronald W. Henderson (Ed.D. Candidate), Assistant Professor of Education, University of Oregon, Eugene, Ore. (Reported by David L. Patrick, Ph.D., Coordinator of Research, University of Arizona, Tucson, Ariz. 85721.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report to Office of Education; publication in periodicals also planned.

21-DA-4 CHILDREN'S ESTIMATES OF RELATIVE FREQUENCIES

Purpose: To discover how children assess certain regularities in the environment and how they utilize information to modify opinions concerning state of the environment.
Subjects: 6- and 11-year-old children.
Methods: Children are investigated with respect to accuracy in making estimates of relative frequencies of events in a situation in which mathematics may not be used. An attempt is made to determine the precise relationship between real and estimated relative frequencies, and certain factors which are thought to distort children's estimates are examined. Also, they are given sample data to test ability to draw inferences concerning population values in an attempt to discover the manner in which children at various ages deal with partial information concerning a larger set of events, ways in which children modify previous opinions on the basis of additional data, and how children's feelings of confidence concerning their judgments are affected by various characteristics of the data.
Duration: June 1966-June 1967.
Investigator(s): Herbert P. Ginsburg, Ph.D., Assistant Professor, Department of Child Development and Family Relationships, New York State College of Home Economics, Cornell University, Ithaca, N. Y. 14850.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-DB-1 DEVELOPMENT OF COGNITIVE COMPONENTS IN CHILD DRAWINGS

Purpose: To investigate the relative efficacy of daily practice in drawing familiar forms and copying unfamiliar forms, and of visual stimulation through handling picture books and photographs depicting familiar and unfamiliar objects in increasing the ability to draw representatively.
Subjects: Approximately 120 children between 5 and 16 years of age, living in Peru at an elevation of about 14,000 feet. Children have no schooling, no exposure to pictorial forms, and have very few objects with which to play.
Methods: A program of perceptual and drawing tests has been devised with which to study the development of perceptual processes and object concepts as portrayed in drawings. It is expected that considerable light may be thrown on how rapidly children can learn to translate newly acquired object concepts into pictorial form, and the roles of practice and visual experience in this development.
Duration: Not reported.
Investigator(s): Dale B. Harris, Ph.D., Professor and Head, Department of Psychology, The Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-DB-2 DEVELOPMENTAL ASPECTS OF INTELLECTIVE ABILITIES

Purpose: To study growth of abilities of children in elementary and secondary school.
Subjects: Elementary, secondary school, and college age children.
Methods: Development of aptitude battery, and factor analysis of results of 30 tests of cognitive ability.
Findings: There is increasing differentiation and clarification of abilities with age, with a qualitative difference in sex patterns.
Duration: June 1966-June 1969.
Investigator(s): Philip S. Very, Ph.D., Assistant Professor of Psychology, University of Rhode Island, Kingston, R. I. 02881.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Genetic Psychology Monographs, Spring 1967 and later issues.

21-DB-3 ASSESSMENT AND DEVELOPMENT OF COGNITIVE SKILLS IN YOUNG CHILDREN

Purpose: To investigate ways in which key cognitive skills develop in young children and methods for advancing these skills; to develop a set of observational and instructional materials for use in kindergarten and pre-kindergarten classes, and to develop techniques for familiarizing teachers with concepts and procedures used in assessing and fostering intellectual growth; to give assistance to New York City in utilization of these techniques.
Subjects: Approximately 288 New York City school children, ages four to six, including upper-middle class white children and lower class Negro children.
Methods: During individual testing sessions, each child will be tested with tasks specifically designed to measure cognitive development in areas of classification, time concepts, understanding of change, and selected language correlates.
Duration: April 1966-December 1968.

Investigator(s): Richard S. Melton, Ph.D., Research Psychologist, Educational Testing Service, Princeton, N. J. 08540. (Reported by Frances M. Aversa, Research Assistant, Educational Testing Service.)
Cooperating group(s): Carnegie Corporation.
Publication: Educational Testing Service research bulletins and appropriate journals.

21-DB-4 STUDIES OF COGNITIVE, MOTOR, AND MOTIVATIONAL FACTORS IN REHABILITATION OF CHILDREN AND ADULTS

Purpose: To develop test scales that present stimulus materials through selected sensory receptors; to provide estimates of cognitive capacity through the use of learning tasks; to correlate the ease with which children are trained to be independent and dependent in completing tasks with the gross clinical patterns of independence and dependency in the ward and clinic.
Methods: Selection of existing tasks which minimize the complexity of the motor response; "probing" through the use of training, a new approach to formal assessment required most frequently in cases of very low ability or in grossly handicapped children; focusing on the results of training regimes established for each child and noting the rate of acquisition of the responses involving dependency and competence.
Duration: 1965-1968.
Investigator(s): Peter F. Briggs, Ph.D., and Auke Tellegen, Ph.D., Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center, Minneapolis, Minn. 55455. (Reported by Frederic J. Kottke, M.D., Professor and Head, Department of Physical Medicine and Rehabilitation.)

21-DB-5 STUDY OF EARLY COGNITIVE DEVELOPMENT IN CULTURALLY DISADVANTAGED CHILDREN

Purpose: To study the intellectual and linguistic development of disadvantaged children.
Subjects: Children ages 3 to 12 from culturally deprived and middle class families.
Methods: Experimental procedures are utilized to study the role of language, stimulus complexity, and training procedures in conceptual learning.
Findings: Disadvantaged children are capable, when properly instructed, to solve concept problems as effectively as middle class children. Training in discrimination and induction improves performance, while training in labelling has no effect on concept attainment.
Duration: July 1964-July 1968.
Investigator(s): Leon Eisenberg, M.D., Professor of Child Psychiatry, and Sonia F. Osler, Ph.D., Associate Professor of Medical Psychology and Pediatrics, School of Medicine, Johns Hopkins University, Baltimore, Md. 21205.
Cooperating group(s): Grant Foundation.
Publication: *Child Development*, one article in press, another submitted.

21-DC-1 FLICKER DISCRIMINATION AND GENERALIZATION BY TODDLERS

Purpose: To study generalization behavior in pre-verbal children as a function of prior operant discrimination training; to test assumption that the more a subject learns about the properties of a stimulus dimension, the more his behavior will be controlled by stimuli belonging to that dimension.
Subjects: Children ages 15 to 30 months.
Methods: Degree of acquired familiarity with visual flicker stimuli is manipulated by nature of discrimination training given to three separate groups of subjects: (1) discrimination training between a 15 cps light flash and another flickering stimulus, (2) training between the presence and absence of the 15 cps stimulus, and (3) no explicit discrimination training. The 15 cps light is continuously presented and reinforced, but there is no occasion for this stimulus to be compared against other stimuli. To determine effect of such training, a subsequent task involving presentation of a number of flickering stimuli together with the previously experienced 15 cps stimulus is given to all subjects. Light is occasionally reinforced to keep children continually engaged.
Duration: Not reported-May 1967.
Investigator(s): Paul Weisberg, Assistant Professor of Psychology Brown University, Providence, R. I. 02912.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Article has been submitted to *Journal of the Experimental Analysis of Behavior*.

21-DC-2 THE EFFECT OF TEACHING CHILDREN TO GUIDE THEIR OWN DEVELOPMENT

Purpose: To determine the effect of extending the program of teaching the dynamics of behavior to include applications by the pupil to the guiding of his own development.
Subjects: Fifth grade pupils in Council schools.
Methods: Teaching units dealing with applications of the knowledge of dynamics of behavior previously learned to the pupil's own development and its guidance were prepared and are now being taught. Measurements of pupil learning and growth in ability to learn on his own are being collected. Experimental and control groups are employed.
Duration: January 1966-indefinite.
Investigator(s): Karen Pritchett, Ph.D., Research Associate, Educational Research Council of Greater Cleveland, Rockefeller Bldg., Cleveland, Ohio 44113. (Reported by Ralph H. Ojemann, Ph.D., Director, Child-Educational Psychology and Preventive Psychiatry Division, Educational Research Council of Greater Cleveland.)
Cooperating group(s): The Grant Foundation.

21-DC-3 THE DEVELOPMENT OF CONCEPTS OF THE CONSERVATION OF LENGTH, NUMBER, AMOUNT, AND VOLUME THROUGH USE OF GUIDED LEARNING PROGRAMS

Purpose: To test effects of a guided learning program for teaching young children to conserve length, number, amount, and volume.
Subjects: Random samples of children, ages four to six.
Methods: A guided learning program is being developed which is designed to build on the child's present concepts of conservation and carefully sequenced to include learning tasks that lead toward the conservation of volume. The children will be given pre-, intermediate, and post-tests to assess their growth in the concepts.

Duration: April 1967-indefinite.
Investigator(s): Karen Pritchett, Ph.D., Research Associate, and Ralph H. Ojemann, Ph.D., Director, Child-Educational Psychology and Preventive Psychiatry Division, Educational Research Council of Greater Cleveland, Rockefeller Bldg., Cleveland, Ohio 44113.
Cooperating group(s): The Grant Foundation.

21-DC-4 VERBAL LEARNING IN CHILDREN

Purpose: To study associative behavior and verbal learning in children of different ages with a view to testing notions derived from an interference interpretation of learning.
Subjects: 80 second and 80 fifth grade children from middle and upper-middle class homes.
Methods: Subjects are given standard paired-associate training on seven-item lists consisting of single-letter stimuli and single-letter responses. An attempt is made to equate sub-groups for level of learning prior to testing for retention. Sub-groups vary with respect to associative strength of connection between the stimulus and response terms as measured on both adult and child norms.
Findings: The younger group learned significantly more slowly but retained significantly better than the older group. There was a trend for the highly associated lists to be better retained than the less highly associated lists (not significant). However, in a subsequent study in which level of learning was controlled by an experimental technique for equating the number of reinforcements given to all items, the differences due to grade level disappeared, and the effect of meaningfulness was replicated.
Duration: September 1964-August 1967.
Investigator(s): Geoffrey Keppel, Ph.D., Assistant Professor of Psychology and Assistant Research Psychologist, and Harriett Amster, Ph.D., Associate Research Psychologist, Institute of Human Learning, University of California, Berkeley, Calif.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Psychonomic Monograph Supplements 1:9:211-238, 1966. Other articles planned.

21-DC-5 LEARNING DISABILITIES IN CHILDREN: SIBLING STUDIES

Purpose: To discover whether the characteristics of academically handicapped children can be more precisely identified and described; to further clarify the causes of learning disabilities; and to explore those aspects of learning disabilities that appear to be familial.
Subjects: 304 elementary and junior high school age children: 76 educationally handicapped, with 76 siblings and 140 parents, and 76 academically successful, with 76 siblings and 137 parents.
Methods: Children are given educational, psychological, and medical evaluations. Parents are interviewed and given reading tests. Educationally handicapped children are compared with their same sex siblings and with matched same sex children who are academically successful, and their siblings; and parents of the educationally handicapped children are compared with the parents of the academically successful children on a number of items.
Duration: September 1966-not reported.

Investigator(s): Freya W. Owen, Ph.D., Coordinator, Educationally and Mentally Handicapped Department, Palo Alto Unified School District, 25 Churchill Ave., Palo Alto 94306; Pauline A. Adams, Ph.D., Psychologist, Stanford Convalescent Home, 1020 San Mateo Dr., Menlo Park; and Thomas Forrest, M.D., Pediatric Neurologist, Institute for Childhood Aphasia, School of Medicine, Stanford University, Palo Alto, Calif. 94304.
Publication: Publication planned.

21-DC-6 A MULTI-DIMENSIONAL STUDY OF LEARNING DISORDERS IN CHILDREN WITH NORMAL INTELLIGENCE, WITHOUT GROSS NEUROLOGIC DEFECTS, AND WITHOUT SERIOUS PRIMARY EMOTIONAL DISTURBANCE

Purpose: To determine causes for learning disorders and their interaction.
Methods: The social influences studied are parental attitude, parental interaction, and source of parental anxiety or focus of parental concern. Medical data will include detailed history of birth, development, and serious illness, and careful neurological examination. Psychological assessments will attempt to study every known sensory, perceptional, and motor response system that codes and delivers information for cognitive development. Social-personal behavior is to be rated by psychologists, teachers, and parents and the ratings compared. The test battery now consists of 42 tests, and the data from the tests are being interpreted under a system of blind analysis as psychometric technicians supply the data. If specific problems can be found, management and prescriptive teaching will be employed, the results of which will be determined through active follow-up of the children seen in this program.
Duration: 1967-indefinite.
Investigator(s): J. Philip Ambuel, M.D., Professor of Pediatrics, Ohio State University, and Medical Director, Outpatient Department, Children's Hospital; David Sabatino, Ph.D., Instructor in Psychology, Ohio State University, Columbus 43210; and Curtis Brown, M.S.W., Children's Hospital, Columbus, Ohio 43205.

21-DC-7 A COMPARISON OF VISUAL AND TACTUAL DISCRIMINATION LEARNING OF RETARDED AND SCHIZOPHRENIC CHILDREN

Purpose: To determine the course of learning by schizophrenic children as a function of the sense modality used in obtaining information from the environment.
Subjects: 45 children, educable mentally retarded, educationally retarded with mild emotional or behavioral disturbance, and severely emotionally disturbed. Retarded children were used as a control for mental age.
Methods: Children were assigned randomly to two experimental groups and given the object discrimination problem and the oddity problem. The visual-to-tactual group was given each problem first with visual stimuli followed by presentation of the problem with tactual stimuli. The tactual-to-visual group received the tactual and visual stimuli in reverse order. All of the children received both presentations of the object discrimination problem before the two presentations of the oddity problem. The apparatus used was a modification of the Wisconsin General Test Apparatus.
Findings: Data yielded support for the notion that schizophrenic children make more efficient use of touch than of vision in orienting to their environment since tactual experience provided them with a broader base for transfer than visual experience. The schizophrenic children resembled normal groups in the use they made of information gathered from the environment and in ability to maximize the probability of reward.

Duration: Not reported.
Investigator(s): Suzanne D. Hill, Ph.D., Assistant Professor of Psychology, Louisiana State University in New Orleans, Lakefront, New Orleans, La. 70122; and Lester W. Barnett, Jr., Auburn University, Auburn, Ala. 36830.
Publication: Submitted to *Journal of Experimental Child Psychology*.

21-DC-8 RELATIONSHIP BETWEEN LEARNING CONCEPTS AND STUDENT ACHIEVEMENT

Purpose: To investigate developmental aspects of conceptual behavior in a rigorously controlled laboratory situation, and to investigate the relationship of concept learning in this laboratory situation to achievement in curricular areas of the junior high school.
Subjects: 120 students, 20 males and 20 females each from grades seven, eight, and nine.
Methods: Figural-dimensionalized stimulus material is used in two types of experiments. In the first type, responses to problems are analyzed to determine the effects of grade level, sex, and exemplars and non-exemplars of concepts on information processing and concept attainment. Responses to additional problems are analyzed to determine effect of the same variables upon concept attainment tasks *in toto*. Second type of experiment consists of a factor analysis of sub-scores from first type of experiment, time-to-criterion scores from total concept attainment problems, and sub-scores from four tests of curricular achievement: numerical, verbal, social studies, and science. Alpha factor analysis and incomplete image analysis are used for data reduction. Normal varimax and oblique rotation procedures are used to achieve both orthogonal and oblique simple structure.
Findings: It appears that more liberal generalizations of research results from the tightly controlled experimental settings to conventional learning situations are justified.
Duration: December 1965-September 1966.
Investigator(s): Glenn E. Tagatz, Ph.D., Associate Professor, and Dean L. Meinke, Assistant Professor, Department of Education/Psychology, Indiana State University, Terre Haute, Ind. 47809; and Elmer A. Lemke, Ph.D., Associate Professor, Illinois State University, Normal, Ill. 61761.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-DC-9 AROUSAL OF INFANTS IN LEARNING AND DEVELOPMENT

Purpose: To identify individual characteristics in infant behavior which may be used to determine optimal stimulus conditions for evoking and reinforcing infant responses; specifically, to test hypothesis that response acquisition will be more efficient under optimal stimulus match conditions than under non-match conditions.
Subjects: Infants, one to seven months old.
Methods: Observation of visual fixation responses, autonomic responses, and movement to determine reliable patterns of individual infants. Using these patterns, discrimination learning tasks are developed in which some situations present stimuli that match the infant's response patterns and others do not.
Duration: Phase I: July 1965-January 1967.
Investigator(s): Frances Degen Horowitz, Ph.D., Associate Professor, Department of Human Development, and Research Associate, Bureau of Child Research, University of Kansas, Lawrence, Kan. 66044.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-DC-10 AN INVESTIGATION OF PERCEPTUAL AND STORAGE MECHANISMS IN CHILDREN WITH LEARNING DISORDERS AND EMOTIONAL PROBLEMS

Purpose: To extend knowledge of mechanisms underlying dichotic listening performance (DLP) through study of performance of normal children. Two previous investigations have indicated that DLP involves both perceptual and short-term storage processes that might be expected to increase in efficiency with the advance of normal childhood development. Also, to discover if either or both of these perceptual and storage functions might be impaired in children with learning disorders and emotional problems.
Subjects: 120 normal children, 19 learning disordered children, and 20 emotionally disturbed children, all ages 5 to 10.
Methods: The 120 normal children were tested for dichotic listening performance; 19 children with learning defects were compared on DLP with 19 normal children matched for age, sex, and approximate intelligence; and 20 children with emotional disturbance were similarly compared with another 20 matched normal children.
Findings: Short-term memory function is a powerful source of variation in DLP, as also is age in childhood. Ear-asymmetry is a weaker source of variation. Short-term memory function is affected when brain pathology or cerebral surgery has produced learning impairment in man. Study suggests that children with learning disorders are impaired, compared to controls, on both perceptual and storage aspects of performance, whereas emotionally disturbed children differed little from controls on either aspect of performance.
Duration: May 1965-April 1966.
Investigator(s): James Inglis, Ph.D., Professor of Psychology, Health Sciences Center, Temple University, Philadelphia, Pa. 19129; and Robert F. Briggs, M.D., Assistant Professor of Psychiatry, Queen's University, Kingston, Ontario, Canada.
Cooperating group(s): Ontario Mental Health Foundation.
Publication: Proceedings of the Seventh International Congress of Gerontology. Vienna: Vienna Academy of Medicine, 1966; paper presented at annual meeting of the Canadian Psychological Association, Montreal, June 1966; paper to be presented at annual meeting of the Canadian Psychological Association, Ottawa, June 1967; Human Development, in press, 1967; others.

21-DD-1 IRREVERSIBLE MATURITY INDICATORS IN MENTAL TEST ITEMS

Purpose: To study the behavioral tasks as performed by a large number of children in mental or developmental test situations to discover what they reveal about stages in development as set forth by Piaget.
Subjects: 3,583 protocols, ages 3 months to 13 years. These included longitudinal records for 737 children and individual records for 2,109 children.
Methods: Records on success or failure on items from six different mental tests were obtained. An array of maturationally dependent items was obtained by working out (by computer) the probability of failure on an item if another easier item had been failed, or of failing an item if another easier item had been passed. Only items for which P_1=o when P_2=100 or P_1=100 when P_2=o were included in the study. Piaget's developmental stages for object concept, spatial field, and intelligence were analyzed and compared with these probability findings to discover the degree of agreement of the two approaches to maturational development. A ranked order of difficulty was worked out for each item according to age.
Findings: The mental test item relationships confirm Piaget's object

concept and spatial field theories, but indicate weakness and narrowness in his concept of intelligence. As analyzed in these data, his categories appear to be arbitrary and too limited in scope.
Duration: September 1965-March 1967.
Investigator(s): Rachel S. Ball, Ph.D., Professor Emeritus, Department of Psychology, Arizona State University, Tempe, Ariz. 85281.
Cooperating group(s): The Merrill-Palmer Institute, Detroit, Mich.; Kent State University, Kent, Ohio; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A duplicated bound report is being prepared for the National Institute of Child Health and Human Development, and a limited number of additional copies will be available.

21-DD-2 INVESTIGATION OF THE DIAGNOSTIC SENSITIVITY OF THE KTK PERFORMANCE SCALE IN REVEALING HIDDEN DEVELOPMENTAL POTENTIAL IN APPARENTLY RETARDED, BRAIN-DAMAGED, AND EMOTIONALLY DISTURBED CHILDREN

Purpose: To find out whether performance tests are less vulnerable to the ravages of emotional and organic pathology. Reliance on too verbal tests may set the aim for rehabilitation too low.
Subjects: At least 30 9.6- to 10.5-year-old boys and girls in Finland diagnosed as emotionally disturbed, convulsive, brain-damaged, retarded, bilingual (speaking neither language adequately), those with reading-spelling impairment, and a normal group. Groups were supplemented with another normal group from rural and isolated areas.
Methods: The KTK Performance Scale, Draw-A-Person, and a vocabulary test were given individually to each child.
Duration: January 1966-June 1967.
Investigator(s): Anna S. Elonen, Ph.D., Professor of Psychology, Children's Psychiatric Hospital, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.
Publication: To be published as a monograph by Acta Academiae Pedagogical Jyväskyläensis. Can be obtained from the library of the University of Jyväskyla, Jyväskyla, Finland.

21-DD-3 ABOVE AVERAGE I.Q. SCORES AND FUTURE SCHOOL ACHIEVEMENT

Purpose: To study the relationship between group and individual I.Q. scores of children of above average intellectual capabilities; to determine which, if any, of the I.Q. test scores is a significant, more accurate predictor of future scholastic achievement; to ascertain whether there is justification for eliminating individually administered tests of intelligence in programs for the selection of pupils of above average intellectual ability.
Subjects: 60 children of above average intellectual capabilities.
Methods: School achievement test results of approximately 10 6th, 7th, 8th, 9th, and 12th grade students, half of them male and half female, who were tested two to three years before on the Lorge-Thorndike Group Intelligence Test, the Stanford-Binet (L-M), WISC or WAIS Individual Tests of Intelligence, will be statistically analyzed by means of product-moment correlations to determine whether there are statistically significant differences between the accuracy of the I.Q. tests in predicting future school achievement. Possibly, such variables as grade level, sex, and time interval may also be analyzed to determine their effects on the dependent variable of school achievement.

Findings: With respect to students of above average intellectual development, it would appear that the numerical value of a student's I.Q. score is not as valid or significant in measuring his "immediate" school achievement, or for selecting a student for inclusion in an accelerated or enrichment program, as is the relative standing of the individual I.Q. score in the group of students involved. Percentile or standard score appears to be a much more valid and valuable measure as a selection device or predictor of school achievement. It may be speculated that a school system limited in resources, time, and personnel might validly use the results of group I.Q. tests for the selection and identification of students of above average intellectual development, provided the scores are reported in such a way that the individual student's standing in his or her particular group class level or sex is taken into consideration.
Duration: September 1962-January 1967.
Investigator(s): Bert Friedman, Ph.D., School Psychologist, Ballston Spa Elementary School, 70 Malta Ave., Ballston Spa, N. Y.
Cooperating group(s): New York State Department of Education.
Publication: Annual reports may be requested from principal investigator or New York State Department of Education, Albany, N. Y.

21-DE-1 AGE, SEX, AND TYPE OF MEMORY INFORMATION IN CONCEPT LEARNING

Purpose: To explore effect on concept learning of (1) different amounts of available information; (2) variation in type of previous information, i.e., correct, incorrect, and both correct and incorrect responses; (3) sex; and (4) age.
Subjects: 135 male and 135 female volunteers, ages 10 to 18.
Methods: Subjects are divided into three age groups and randomly assigned within each group to experimental conditions. Design is a 3X3X3X2 factorial which includes three levels of instance availability, viz., zero, one, or two of the previously presented instances will be available for subjects' visual inspection on any trial; three conditions of type of available instances, i.e., correctly sorted instances only, incorrectly sorted only, and both correctly and incorrectly sorted; three age groups, labeled X, Y, and Z, and sex. Subjects are asked to categorize 64 stimuli each with a different geometric pattern, into four categories. Each card contains one, two, three, or four identical figures in one or four colors. Form is the relevant dimension. A sorting tray with four double slots, labeled either A, B, C, or D, is in front of the subject. When the required level of availability is reached, the earliest of all exposed instances is removed.
Duration: January 1962-February 1967.
Investigator(s): Vladimir Pishkin, Ph.D., Associate Professor of Medical Psychology, Department of Psychiatry, Neurology, and Behavioral Sciences, Oklahoma University Medical School, Oklahoma City, and Chief Research Psychologist; and A. Wolfgang, Ph.D., Research Associate in Psychology, Behavioral Science Laboratories, Veterans Administration Hospital, 921 N.E. 13th St., Oklahoma City, Okla. 73104.
Cooperating group(s): U. S. Veterans Administration.

21-DE-2 HOW CHILDREN CONCEPTUALLY ORGANIZE MUSICAL SOUNDS

Purpose: To test the relevance of one aspect of Piaget's theory of concept development, namely, that of the principle of conservation, to musical growth and development.
Subjects: Two groups of 80 children each, stratified by age and sex.

Methods: Musical tasks are administered to the first group in a preliminary testing. Refined versions of these tasks are then administered to the second group. This group is pre-tested for conservation of tone and rhythm and then randomly assigned to experimental training procedures designed to identify the relationship between decentration and conservation and to separate tonal memory from conservation. Following training procedures, post-tests for conservation of tone and rhythm will be administered. Data will occur in terms of right or wrong answers which will be analyzed as proportions of the total group and by complex cross-classification procedures. The protocol of each subject will be analyzed according to Piaget's methodology.
Duration: February 1966-January 1968.
Investigator(s): Dr. Marilyn Pflederer, Associate Professor of Music Education, and Lee B. Sechrest, Ph.D., Associate Professor of Psychology, Northwestern University, Evanston, Ill. 60201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-DE-3 MEDIATION AND TRANSFER IN CONCEPT FORMATION

Purpose: To identify, via experimental techniques such as transfer designs, those processes of a conceptual nature involved in children's discrimination learning.
Subjects: Nursery school, kindergarten, and third grade pupils; West African children and adults also used in other studies.
Methods: Initial experimentation used standard discrimination learning techniques, including reversal and non-reversal shift designs and optional shift designs. Further studies used transfer designs. Additionally, pilot work was performed utilizing paired-associate learning of conceptually ordered materials.
Findings: (1) Optional shift behavior is influenced by both mediational ability and perceptual factors in the youngest age groups; (2) different transfer functions are indicated for nursery school and kindergarten children as opposed to third graders; (3) evidence has been found for strategies of "contingent" or "non-contingent" learning of discriminations which are independent of stimulus dimensions and hence, do not reflect mediation in the classically understood sense.
Duration: September 1965-August 1966.
Investigator(s): Joseph A. Glick, Ph.D., Assistant Professor of Psychology, Yale University, New Haven, Conn. 06510.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles in press and in preparation.

21-DF-1 ASSESSING AND DEVELOPING THE CREATIVE THINKING ABILITIES OF PRE-SCHOOL CHILDREN

Purpose: To improve present methods and devise new ones for assessing the creative thinking abilities of pre-school children; to describe psychometrically the creative development process from ages three to six; and to determine what factors inhibit and facilitate.
Subjects: 250 children, ages three to six.
Methods: Longitudinal, experimental, psychometric case study.
Duration: September 1966-continuing.
Investigator(s): E. Paul Torrance, Ph.D., Chairman, Department of Educational Psychology, University of Georgia, Athens, Ga. 30601.

Cooperating group(s): Research and Development Center in Continuous Educational Stimulation, University of Georgia.
Publication: Journal articles, books, and monographs planned.

21-DG-1 ON THE LEARNING OF SPEECHLIKE VOCABULARIES: AN EXPERIMENTAL STUDY WITH CHILDREN

Purpose: To determine whether perception of a speechlike continuum exists.
Subjects: 24 fifth grade children.
Methods: Subjects will have satisfactorily completed a number of screening tests of vision, hearing, speech, and intelligence. They are asked to identify certain acoustic stimuli that will constitute a number of ensembles. Eight different stimuli comprise an ensemble. Physical characteristics of stimuli are manipulated in several ways: general structure of elements in a given ensemble are arranged to be more or less like speech, and information in ensembles is coded primarily into one, two, or three physical parameters (frequency, intensity, and time).
Duration: Not reported.
Investigator(s): Kenneth W. Burk, Ph.D., and John H. Gilbert, Graduate Student, Speech and Hearing Clinic, Purdue University, Lafayette, Ind.
Cooperating group(s): Purdue University Research Foundation.

21-DG-2 RELATIONSHIPS BETWEEN PERCEPTION AND READING

Purpose: To investigate at three different age levels the relationships between perception (i.e., size constancy, shape constancy, spatial orientation, and speed of processing information) and reading achievement as assessed by the comprehension section of the California Reading Test and the Gates Diagnostic Reading Test.
Subjects: Approximately 80 elementary school children, 40 girls and 40 boys, ages 7, 9, and 11.
Methods: Size constancy will be measured in terms of extent to which judgments of the size of a disc approximate actual size of the disc despite variation in distance of disc from subject. Shape constancy will be defined as extent to which judgments of the shape of a circle viewed obliquely correspond to actual shape of the circle. Spatial orientation will be defined as extent to which, under varying amounts of body tilt, judgments of verticality, as indicated by adjustments of the position of a rod in a two dimensional space, approximate the objective vertical. Speed of processing information will be measured in terms of ability to select from a prepared list words and phrases matching stimuli flashed on a screen and followed by interfering stimuli (i.e., nonsense syllables). Correlation coefficients will be computed at each age level for each of the possible pairs of variables under study.
Duration: September 1965-August 1967.
Investigator(s): John R. Bergan, College of Education, University of Arizona, Tucson, Ariz.; Robert W. Ridgway, and Dale P. Scannell, Professors of Education, University of Kansas, Lawrence, Kans. 66045.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-DH-1 A LONGITUDINAL STUDY TO ESTABLISH NEUROLOGICAL AND LINGUISTIC DIFFERENTIAL CRITERIA FOR NON-VERBAL CHILDREN

Purpose: To attempt to establish differential criteria for the following groups of non-verbal children: aphasic, autistic, mentally retarded, and hearing impaired.
Subjects: Children in age range from three to eight referred to Institute for Childhood Aphasia for diagnosis and/or training.
Methods: Examination of clinical histories (medical, developmental, etc.), neurological examination, including electroencephalographic, psychodiagnostic, and linguistic. Factor and cluster analyses of 30-40 entries for each child.
Findings: Preliminary findings indicate that differences will be found for some or all groups.
Duration: September 1965-August 1968.
Investigator(s): Jon Eisenson, Ph.D., Professor of Speech Pathology and Audiology and Director, Institute for Childhood Aphasia, and Thomas Forrest, M.D., Pediatric Neurologist, Institute for Childhood Aphasia, School of Medicine, Stanford University, Palo Alto, Calif. 94304.
Publication: Results will probably be submitted to neurological and pediatric journals.

21-DH-2 TOWARD AN OBJECTIVE MEASURE OF STRUCTURAL COMPLEXITY OF CHILDREN'S LANGUAGE

Purpose: To explore indices of language development; to establish a basis for a standardized instrument for objectively measuring structural complexity of children's language.
Subjects: 80 pupils in grades four, six, and eight in High Point, N. C. public schools. Mean I.Q. for grade four was 113; for grade six, 117; for grade eight, 109.
Methods: Children were asked to re-write a narrative composed of simple declarative sentences by combining short sentences to make longer sentences. In this way, they could demonstrate their ability to combine kernel structures to form sentences of greater structural complexity. Each child's writing was segmented into minimal terminable syntactic units. Mean number of words per clause, mean number of clauses per T-unit, and mean number of words per T-unit were computed. Statistical analysis of variance was executed to test mean differences at various grade levels for significance at the .01 level.
Findings: Mean words per clause increased from 6.41 for grade four to 7.11 for grade six to 8.17 for grade eight (F ratio, 22.78). Mean clauses per T-unit increased from 1.14 to 1.30 to 1.45 for the three grades (F ratio, 23.23). Mean words per T-unit increased from 7.37 to 9.27 to 12.01 (F ratio, 39.20). Increments on each of the three measures are significant at the .01 level. Analysis based on techniques of transformational-generative grammar indicates that clause length and number of clauses per T-unit reflect syntactic complexity; since T-unit length is accounted for by a combination of these two factors (mean clause length x mean clauses per T-unit x mean T-unit length), it appears that T-unit length alone is a satisfactory measure of structural complexity. The apparent success of this method indicates feasibility of designing a standardized instrument for measuring structural complexity.
Duration: November 1965-October 1966.
Investigator(s): Roy C. O'Donnell, Ph.D., Associate Professor, Department of English Education, Florida State University, Tallahassee, Fla. 32306.
Cooperating group(s): Research Council, University of North Carolina at Greensboro.
Publication: Plans indefinite.

21-DH-3 STUDIES OF THE ROLE OF SPEECH IN THE PROBLEM-SOLVING OF ADVANTAGED AND DISADVANTAGED YOUNG CHILDREN

Purpose: To explore the interrelation between development of conceptual abilities and language; to examine how disadvantaged youngsters use their basic vocabulary in problem-solving, i.e., are they less likely to spontaneously introduce the words into problem-solving and, when they use the words, will they be less likely to facilitate problem-solving.
Subjects: Pre-school and primary grade children.
Methods: A delayed-reaction situation was employed in which children had to remember the serial order of common objects. Performance was observed both when the children were prompted to name the objects and when they were not. Performance was observed in two senses: memory, and the use of names of objects to be remembered during the delay period. Also, a study is being developed which will utilize a more complex problem-solving situation, namely, one involving making reversal and non-reversal shifts.
Findings: Six-year-old middle class children were more likely to spontaneously use common names to memorize the series than five-year-old middle class children and five- and six-year-old poor children. Naming tended to facilitate memory performance on easier problems (two pictures) and to interfere on harder problems (three pictures).
Duration: June 1965-September 1967.
Investigator(s): Gerald Gratch, Ph.D., Associate Professor, Department of Psychology, University of Houston, Houston, Tex. 77004.
Cooperating group(s): Head Start Project, U. S. Office of Economic Opportunity; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper available from Dr. Gratch; journal article planned.

21-DH-4 ACQUISITION OF JAPANESE AS A NATIVE LANGUAGE

Purpose: To follow the development of competence in a language historically unrelated to English, so as to evaluate the hypothesis that initial stages of language acquisition reflect children's inborn capacities for language.
Subjects: Two children, now three years old, both of whom live in Tokyo, Japan.
Methods: Children are visited twice a month in their homes. Everything said is tape recorded. Emergence of selected grammatical forms can be traced, *ex post facto*.
Findings: Japanese- and English-speaking children construct sentences on same basic principles, none of which is exemplified in the respective adult speech.
Duration: September 1965-indefinite.
Investigator(s): David McNeill, Ph.D., Associate Professor, Department of Psychology, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: In *The Genesis of Language*, F. Smith and G. A. Miller (Eds.). Cambridge: MIT Press, 1966. In *Psycholinguistic papers*, J. Lyons and R. J. Wabes (Eds.). Edinburgh: The University of Edinburgh Press, 1966.

21-DH-5 COMPARATIVE STUDY OF LANGUAGE DEVELOPMENT AND SOCIALIZATION

Purpose: To examine language development in languages other than English, the development of the social aspects of language use and adult attitudes and practices regarding these, and the effects on child language development of these varying practices; also, to train a team of students who will do field work as part of a comparative project.

Subjects: Families selected for sociological properties in a number of societies and ethnic groups in the United States.

Methods: Observation of family-child and peer-child interaction, questionnaires, testing of language development.

Duration: July 1966-1968.

Investigator(s): Susan M. Ervin-Tripp, Ph.D., Associate Professor of Speech, and Dan I. Slobin, Ph.D., Assistant Professor of Psychology, University of California, Berkeley, Calif. 94720.

Publication: Field manual for use of other field workers; joint volume of comparative findings; individual dissertations and other individual publications planned.

21-DH-6 THE EFFECT OF BILINGUALISM AS MEASURED BY 17 HOLTZMAN INKBLOT TEST VARIABLES

Purpose: To study the effect of degrees of bilingualism upon the responses to culture free stimulus material (inkblots) as measured by 17 computer-scored variables; to test the hypotheses that cultural background produces personality differences which can be measured by HIT variables, and that requiring a person to respond in his less proficient language will produce measurably different scores than those secured by responses in the other language.

Subjects: 120 students from grades 7 through 12 who are generally considered to be bilingual.

Methods: Subjects are divided into three groups according to linguistic proficiency, which is determined by a combination of questionnaire self-ratings by the students and ratings by teachers. Students are also divided into three groups according to the strength of cultural background influences. Holtzman Inkblot Tests are group-administered to students in one language, followed in one week by administration in the other language. Testing is in three school grade groups (7-8, 9-10, 11-12), half of which take the test first in each language, utilizing Forms A and B of the Holtzman Inkblot Test to accomplish this counter-balanced testing procedure.

Duration: Not reported.

Investigator(s): Donald R. Gorham, Ph.D., Coordinator of Research, and Louise W. Green, B.S., Research Assistant, Psychology Research Laboratory, Veterans Administration Hospital, Perry Point, Md.; and Mary Tamm (Ph.D. Candidate, University of Mexico), Guidance Counselor, American School, Mexico City, Mexico.

21-DH-7 THE BILINGUALISM DOMINANCE CONFIGURATION

Purpose: To conduct a methodological-conceptual inquiry designed to lead to better means of describing and quantifying bilingualism.

Subjects: Adolescents in New York City who speak Spanish and English.

Methods: Combination of observation, self-report, experimental, and test methods.

Duration: September 1966-August 1968.

Investigator(s): Joshua A. Fishman, Ph.D., Professor of Psychology and Sociology, Yeshiva University, New York, N. Y. 10019.

Personality

21-EA-1 EPIDEMIOLOGY OF CHILDHOOD DEVELOPMENTAL BEHAVIOR

Purpose: To accumulate data on the behavior of normal children which will be used as norms with which to compare the behavior of emotionally disturbed and brain-damaged children.
Subjects: 240 normal children, ages 6 to 12.
Methods: Children are given various tests designed to measure activity levels, fine and gross motor movements, the Orogranulorytic Migratory Rate, and the Finger Sweat Print to measure stress. Parents are given the LaPousse-Monk Behavioral Inventory.
Duration: March-May 1967.
Investigator(s): Irvin A. Kraft, M.D., Associate Professor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Medical Director, Texas Institute of Child Psychiatry, Houston, Tex. 77025.
Publication: Publication planned upon completion.

21-EA-2 STIMULUS CHOICE BEHAVIOR OF CHILDREN

Purpose: To determine some of the stimulus properties which children prefer in free choice situations.
Subjects: Second, third, and fourth grade children.
Methods: A six choice apparatus was utilized in which the depression of a button activated a stimulus. A child could activate from one to six different stimuli depending on the experimental condition.
Findings: The preferred response strategies that a child brings to the experimental situation have an important influence on the observed behavior. Children also exhibited interesting sequences of selecting stimuli of differing complexities. Some information regarding stimulus alternation behavior was obtained.
Duration: January 1966-July 1967.
Investigator(s): F. Michael Rabinowitz, Ph.D., Assistant Professor, Department of Psychology, University of Washington, Seattle, Wash. 98105.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: American Psychologist 21:650, 1966. A paper has been submitted to Child Development. Papers are now being prepared for submission to Psychological Bulletin and Journal of Comparative and Physiological Psychology.

21-EB-1 SELF-CONCEPT, DEPENDENCY, AND DELINQUENCY

Purpose: To develop a measure of self-concept which meets the criterion of symbolic interactionism as a theory; to use that measure as an indicator of delinquency vulnerability; and to relate self-concept to dependency upon mother as a major source of social control over sons. The assumption is that boys who are over-dependent on mothers for self-definitions are less controllable by secondary others and consequently more likely to misbehave in extra-familial situations.
Subjects: 620 lower class boys, of whom 150 are Negro. Also included is a sample of 150 middle class white boys. All subjects range in age from 13 to 18.

Methods: Self-concept is measured by semantic differential scales covering concepts such as "I Am," "My Mother Thinks I Am," etc. The instrument is scored on four factors: evaluation, interpersonal qualities, potency, and activity. Mothers are interviewed with a schedule covering items related to control of sons in areas such as work, school, friends, activities, and friendship choices, and each mother completes the Shaeffer-Bell Scale.
Duration: September 1966-June 1968.
Investigator(s): Michael Schwartz, Ph.D., Associate Professor of Sociology, and Sheldon Stryker, Ph.D., Professor of Sociology, Indiana University, Bloomington, Ind. 47401.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Monograph is planned.

21-EB-2 EGOCENTRICITY IN CHILDREN AND SCHIZOPHRENICS

Purpose: To examine the relationship of children and schizophrenics of different developmental levels on their perspective-taking ability.
Subjects: 20 eight-year-old children and 20 schizophrenics.
Methods: One measure of developmental level and three measures of perspective-taking are given to subjects. Measure of developmental level is derived from the Rorschach test (Friedman, 1952). Perspective-taking situations are varied in content (impersonal and social) and in complexity. Two of the measures of perspective-taking require subjects to sit in front of a three-dimensional model (one model with impersonal content, one model with social content) and to choose the snapshot of the model that best represents the view that a small doll is supposedly seeing from different positions around the model (Piaget, 1956). The third perspective-taking measure requires subject to make up a story to a three-dimensional situation and then to re-tell the story from the point of view of each actor in the story (Feffer, 1959).
Duration: January-September 1966.
Investigator(s): Thomas Wolff, Department of Psychology, University of Rochester, Rochester; and Howard Friedman, Ph.D., Chief, Psychology Service, Veterans Administration Hospital, and Associate Professor of Psychiatry, State University of New York, Upstate Medical Center, Syracuse, N. Y.
Cooperating group(s): Veterans Administration.

21-EB-3 SELF-RATINGS ON INTELLIGENCE IN WHITE AND NEGRO CHILDREN

Purpose: To investigate differences in self-concept between Negro and white children as measured by self-ratings on intelligence.
Subjects: Similar groups of Negro and white children.
Methods: Self-concept measures were obtained through the use of the California Test of Mental Maturity, the Elementary-Short Form, and the Gibby Intelligence Rating Schedule (IRS). Reality-Discrepancy, Self-Discrepancy, and Ideal-Discrepancy scores were obtained.
Findings: Similar groups of Negro and white children differed significantly on measures of Reality- and Self-Discrepancies, but not on Ideal-Discrepancy; the magnitude and direction of these differences are dependent on the sex and I.Q. level of the children, as well as upon the specific measures being used.
Duration: September 1965-June 1966.
Investigator(s): Robert G. Gibby, Ph.D., Chief Clinical Psychologist, Veterans Administration Hospital, and Robert E. Gabler, B.S., Richmond, Va.

21-EC-1 PSYCHOLOGICAL PROCESSES IN MORAL DEVELOPMENT

Purpose: To separate effects of discipline from those of identification and other processes by which the parents' own moral orientation may influence the child.
Subjects: Approximately 200 seventh graders who are either "only" children or the older of two, and both of their parents.
Methods: Data on different aspects of subjects' moral orientation (guilt, moral judgments, moral values), parental discipline, and identification are obtained from children and from each parent. Child data are obtained in a closely monitored group setting; parents are interviewed individually.
Duration: June 1966-May 1970.
Investigator(s): Martin L. Hoffman, Ph.D., Professor of Psychology, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned.

21-EC-2 THE EFFECT OF LEARNING TO CONSIDER ALTERNATIVES AND LONG-TERM CONSEQUENCES ON THE DEVELOPMENT OF VALUES

Purpose: To develop and test a program for teaching the child the method of working out daily situations by considering several alternative courses of action, examining the probable consequences (both short- and long-term) of each, and using such data in making a decision as to what course of action to follow.
Subjects: Pupils in grades three to five in selected Council schools.
Methods: A series of teaching units entitled "Learning to Decide" was prepared for use at the third, fourth, and fifth grade levels. These materials consider various ways of handling daily social situations and provide a number of specific situations in which the child is encouraged to list a variety of alternative methods for meeting the situation and the probable short-term and long-term consequences of each. He is then encouraged to make a decision using these data.
Duration: April 1966-indefinite.
Investigator(s): Ralph H. Ojemann, Ph.D., Director, Child-Educational Psychology and Preventive Psychiatry Division, Educational Research Council of Greater Cleveland, Rockefeller Bldg., Cleveland, Ohio 44113.
Cooperating group(s): The Grant Foundation.

21-EC-3 STORE PREFERENCES OF CHILDREN

Purpose: In an earlier exploratory study of children's consumer behavior, it was indicated that they, like adults, have favorite stores. The purpose of this study is to ascertain the elements of store preference among children and the factors that influence its development.
Subjects: 100 children, grades one through four.
Methods: Depth interviews guided by previous findings.
Duration: January 1967-September 1968.
Investigator(s): James U. McNeal, Ph.D., Head, Department of Marketing, Texas A. & M. University, College Station, Tex.
Publication: Probably in *Journal of Marketing Research*.

21-ED-1 DISORGANIZATION: PERSONAL AND SOCIAL

Purpose: To establish a systematic theory of personal and social disorganization, and to indicate how such a theory may be applied to the range of social problems.
Subjects: Adolescents.
Methods: Utilization of the sociological theory of personality growth and development. This theory is a step toward the systematic development of analytical insights and intellectual skills in dealing with the effect of social disorder on the individual in relation to various problems such as adolescent tensions, delinquency, crime, sexual disorders, alcoholism, mobility, the personal vices, mental pathologies, and suicide. Study illustrates the relationship between basic social disorder and individual symptoms.
Duration: 1963-1966.
Investigator(s): Herbert A. Bloch, Ph.D., Director, Division of Graduate Studies, Brooklyn College, Brooklyn, N. Y. 11210. (Reported by NCCD. See Note, p. 73.)

21-EE-1 STUDIES ON THE HYPERACTIVE CHILD

Purpose: To investigate effects of dextroamphetamine on behavior and intellectual functioning; to investigate the attentional deficit of the hyperactive child and to see how this is affected by (a) methylphenidate, and (b) varying the intensity and quality of auditory stimulation; to study the effect of methylphenidate on the behavior and cognitive functions of the hyperactive child, and to conduct follow-up studies on the group of 120 hyperactive children.
Subjects: 120 hyperactive children of normal intelligence, ages 5 to 12 years (psychotic, cerebral palsied, epileptic children excluded).
Methods: All investigations of the use of drugs are carried out by double-blind uncrossed designs. Control groups are used for all aspects of the study, and results analyzed statistically.
Findings: (1) Although about one-third of the hyperactive children had abnormalities of prenatal or perinatal period, this was non-significant when compared to a control group (direct hospital inspection of data). (2) Dextroamphetamine reduces hyperactivity and distractability and has a slight effect in improving tests of cognitive and motor functions.
Duration: 1961-indefinite.
Investigator(s): Gabrielle Weiss, M.D., Lecturer in Psychiatry, McGill University, and Psychiatrist, Montreal Children's Hospital, and Virginia I. Douglas, Ph.D., Associate Professor of Psychology, McGill University, and Senior Psychologist, Montreal Children's Hospital, 2300 Tupper St., Montreal, Quebec, Canada.
Cooperating group(s): Dominion Provincial Mental Health Grant; Ciba Pharmaceuticals; Department of National Health and Welfare of Canada.
Publication: Canadian Psychiatric Association Journal 9:2:120-130; Journal of the American Academy of Child Psychiatry 5:2, April 1966.

21-EF-1 ANXIETY IN HIGH SCHOOL STUDENTS AS A FUNCTION OF IMPULSIVENESS AND REACTIVE CURIOSITY

Purpose: To investigate the relationship between reactive curiosity (stimulus variation seeking) behavior, impulsiveness, and anxiety. This is part of a larger project intended to make explicit whatever stable relationships can be demonstrated between measurable personality variables.

Subjects: Approximately 500 high school students.
Methods: Correlation techniques are employed to evaluate the relationship between impulsiveness and reactive curiosity, and an analysis of variance approach is used to test the hypothesis that level of anxiety will differ, depending on the possible combinations of high versus low impulsiveness and reactive curiosity.
Duration: March 1967-1968.
Investigator(s): Willy A. Kouw, Ph.D., Assistant Professor, and Ernest Barratt, Ph.D., Research Professor, Department of Neurology and Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.
Publication: Articles planned in psychological journals.

21-EF-2 THE DEVELOPMENT OF FEAR OF FAILURE IN THE CHILD

Purpose: To see what kinds of reinforcement patterns and what kinds of accent on independence training lead to a high score on the Hostile Press measure of fear of failure.
Subjects: 50 ninth grade males used in one study; 60 male college freshmen in another.
Methods: In the study with ninth graders a questionnaire was sent to the parents. College freshmen were interviewed. In both cases the Hostile Press measure (a modified TAT) was administered to the students approximately a week before the second part of the study. Questionnaire and interview were both designed to find out at what time parents began to put pressure on the children to perform independently (find their way around town, dress themselves, etc.), and what parents did in terms of reinforcement when the child came up to their standards and when he did not.
Findings: In both studies early accent on independence led to high Hostile Press. If parents were neutral when the child did as well as expected and punishing when he did not, the child tended to develop high Hostile Press. If he was rewarded when he came up to standard and the parents were neutral when he did not, he tended to be low in Hostile Press.
Duration: 1959-continuing.
Investigator(s): Richard C. Teevan, Ph.D., Professor of Psychology, Bucknell University, Lewisburg, Pa. 17837.
Cooperating group(s): Office of Naval Research.
Publication: Technical Reports; book to be published by Van Nostrand, Spring 1968.

21-EG-1 A STUDY TO EXPLORE NEW METHODS OF IDENTIFYING AND MEASURING MUSICAL TALENT

Purpose: To measure musical talent as a function of personality and cognitive variables assumed to operate within the individual, his attitudes and expectancies which may be considered to be motivational or inhibiting, the manner in which other persons act towards or regard him, as well as sex role, all interacting within a socio-cultural context.
Subjects: Samples are drawn from approximately 1,500 students graduating from high school in 1963.
Methods: 300 measures and data-gathering instruments were administered over a six-year period. Criteria are nine categories of musical performance such as membership in high school band or chorus, composing, arranging, and others. Predictor variables are scores on measures postulated to represent aspects of the theoretical categories of the research model. Multiple linear regression techniques were used to select efficient combinations of predictors representing the theoretical categories in the various analyses.

Duration: Not reported-May 1966.
Investigator(s): Wendell L. Osborn, Research Associate, and J. Carson McGuire, Ph.D., Professor, Department of Educational Psychology, University of Texas, Austin, Tex. 78712.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-EG-2 STANDARDIZED INTERVIEW NORMS ON ELEMENTARY SCHOOL CHILDREN

Purpose: To further develop and investigate the value of promising standardized interview techniques, which have been proven successful with adults, for use with school age children and adolescents; to make a beginning in obtaining normative material to see if neurotic and normal children differ in the same manner as has been reported for neurotic and normal adults.
Subjects: Normal children in grades 1, 3, 6, 7, 9, and 12, and a group of children from the University's clinic for emotionally disturbed children.
Methods: Interview consists of five five-minute periods in which the first is a period of free verbal exchange between subject and interviewer, the second, a silence period, referred to as the stress period, the third, a free response period, the fourth, a stress period in which the interviewer interrupts the subject 12 times or, if this is not possible within five minutes, as often as he can, extending the period to ten minutes if necessary, and the fifth, a free response period. A number of facets of the subject's behavior are scored: amount of speech and silence during each of the periods, number of times he overrides the interruptions of the interviewer, and his speed.
Duration: September 1965-August 1967.
Investigator(s): Michael Dinoff, Ph.D., Associate Professor of Psychology, and Director, Psychological Clinic, University of Alabama, Box 6142, University, Ala. 35486.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Psychological Reports 20:1:119-123, February 1967; two papers presented at Southeastern Psychological Association Conference.

Social

21-FA-1 OBJECTIVE MEASUREMENT OF SOCIALIZATION IN CHILDREN

Purpose: To determine periods and rates at which young children become verbally socialized.
Subjects: About 200 children, ages two and one-half to six and one-half.
Methods: Subjects are asked to respond to a set of standard items broadly representative of both the values of the culture, *per se*, and of the entire range of social desirability.
Duration: July 1965-May 1967.
Investigator(s): James A. Walsh, Ph.D., Associate Professor of Psychology, Iowa State University, Ames, Iowa.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Psychological Reports 20:1:295-304, February 1967.

21-FB-1 THE ATTITUDES OF CINCINNATI JUNIOR HIGH SCHOOL PUPILS TOWARD CINCINNATI POLICE OFFICERS

Purpose: To determine the attitudes of Cincinnati junior high school pupils toward the police officers of that city.

Subjects: Approximately 200 students in one Cincinnati junior high school; 971 students in four junior high schools in the city.

Methods: Initial group of 200 was utilized in constructing an "Attitude-Toward-Police" Scale by standard Thurstone methods. The second group of 971 was then measured by the ATP Scale. Each pupil furnishes information on age, sex, grade, etc., in addition to a scale score. As far as subjects know, all measuring is done anonymously. Scores are analyzed to determine whether significant differences in attitude exist with respect to age, race, sex, school achievement, grade level, church attendance, and socio-economic level (as measured by parent occupation and home ownership).

Findings: Twelve-year-olds have more favorable attitudes toward police than do children ages 14 to 16; thirteen-year-olds have more favorable attitudes than fifteen- or sixteen-year-olds; girls have more favorable attitudes than do boys of their race; whites have more favorable attitudes than do Negroes of their sex; pupils in high ability school groups at any grade level have more favorable attitudes than do pupils in low ability groups; boys who attend church regularly have more favorable attitudes than do boys who do not attend regularly; no conclusive evidence of significant effect of socio-economic level.

Duration: Ongoing.

Investigator(s): Dr. Robert Portune, Teachers College, University of Cincinnati, Cincinnati, Ohio 45221. (Reported by NCCD. See Note, p. 73.)

Cooperating group(s): Cincinnati Board of Education; Cincinnati Police Division.

21-FC-1 RELATION OF SMOKING BEHAVIOR TO SOCIAL STRUCTURE OF STUDENT BODY, HIGH SCHOOL STUDENTS

Purpose: To learn how differentials in onset of smoking, amount smoked, and attitudes to smoking associate with the "crowd" or "group" in high school with which individual students identify.

Subjects: About 200 sophomores, juniors, and seniors in one public and one parochial high school in Milwaukee.

Methods: Main instrument is a pre-coded and self-administered questionnaire, taking 20 to 30 minutes, used with randomly selected homeroom classes in two high schools.

Findings: Preliminary analysis indicates that "crowd" affiliation is an effective predictor of the individual's smoking behavior.

Duration: November 1966-November 1967.

Investigator(s): Edward Wellin, Ph.D., Professor of Anthropology and Social Welfare, University of Wisconsin, Milwaukee, Wis. 53201.

Publication: Paper to be presented at scholarly or professional meeting in Fall 1967 or Spring 1968.

21-FD-1 PARENT PERCEPTION AND SOCIAL ADJUSTMENT AMONG ELEMENTARY AND HIGH SCHOOL STUDENTS

Purpose: To measure parent identification by school age children prior to development of recognized psychiatric disturbances; to test hypothesis that children who revealed inappropriate parent identification would be

rated by fellow students and teachers as more aggressive or withdrawn rather than socially integrative significantly more often than those children who showed normal parent identification.
Subjects: 250 boys and 250 girls, 50 each in 4th, 6th, 8th, 10th, and 12th grades.
Methods: A 140-item parent perception questionnaire was administered to each child. A sociometric scale of 10 items was administered to students in classroom context. These items were categorized as socially integrative, withdrawn, or aggressive. Teachers also rated each student in a forced choice technique on a 10-item rating scale. The student and teacher ratings were combined to categorize the students into one of the three major categories. Students were categorized on the parent perception questionnaire into three groups--one-half standard deviation below the mean; from one-half standard deviation below to one-half above; and above one-half standard deviation. This gave a three by three table from which a chi-square analysis was done. Data for the boys and girls were analyzed separately, and a significant chi-square beyond .001 was obtained for both males and females.
Duration: Winter 1965-indefinite.
Investigator(s): Kenneth R. Piety, Ph.D., Assistant Chief, Psychology Service, Veterans Administration Hospital, Murfreesboro, Tenn. 37130.
Cooperating group(s): Tennessee Public Schools.
Publication: Paper to be published; information available from investigator.

21-FD-2 IDENTIFICATION OF MALE ADOLESCENTS

Purpose: To study identification in adolescent males in order to compare schizophrenic diagnosed sample with delinquents and normals.
Subjects: Three sub-samples of adolescent males, matched for I.Q. and socio-economic status: Western State Hospital adolescent patients diagnosed as schizophrenic, young male offenders admitted to Cascadia Juvenile Diagnostic Center, and samples drawn from a local high school.
Methods: A specially designed version of the Osgood Semantic Differential is administered to each subject. Sub-samples are matched for I.Q. and socio-economic status.
Duration: January 1964-June 1967.
Investigator(s): John B. Marks, Ph.D., Director, Mental Health Research Institute, P.O. Box 907, Ft. Steilacoom, Wash. 98332.
Cooperating group(s): Cascadia Juvenile Diagnostic Center and Mt. Tahoma High School.

21-FE-1 DEVELOPMENTAL STUDY OF VERBAL COMMUNICATION

Purpose: To obtain comparative descriptions of performance in a two-person communication task over the age range of 2 to 18 years; to develop an analysis of factors involved in the growth of communication skills and abilities.
Subjects: Pre-school, school, and college students.
Methods: Subjects are given various forms of a two-person communication task in which one subject describes low-encodable stimuli (such as novel geometric forms) to another subject. Adequacy of the message is assessed through listener accuracy and a number of linguistic measures.
Findings: The experimental paradigm yields orderly, reliable developmental data; communication abilities develop slowly, perhaps not reaching asymptote until the middle teens; and a number of specific variables which seem to mature at different rates have been isolated.

Duration: January 1966-January 1969.
Investigator(s): Sam Glucksberg, Ph.D., and Robert M. Krauss, Ph.D., Assistant Professors of Psychology, Princeton University, Princeton, N. J. 08540.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal of Experimental Child Psychology 3:333-342, 1966; three additional papers in preparation.

21-FE-2 DEVELOPMENT OF NORMAL HUMAN COMMUNICATION SKILLS

Purpose: To study systematically the development of communication skills in children; to standardize and validate test items used in the current testing; and to construct an evaluation manual that can be used clinically for objective and standardized assessment of speech and language levels.
Subjects: 750 normal children between the ages of 3 months and 96 months. Distribution is 50 children, 25 males and 25 females, obtained at designated age intervals.
Methods: Speech and language items from an Experimental Language Manual are administered to each child and responses recorded on score sheets. Tape recordings are made of the vocalizations of each child. Analysis of response to test items is separated into two main areas: verbal comprehension and verbal communication. Articulation and intelligibility ratings and a detailed analysis of linguistic complexity will be carried out.
Duration: October 1965-October 1968.
Investigator(s): Herold S. Lillywhite, Ph.D., Professor of Speech Pathology and Director, Speech and Hearing Department, Crippled Children's Division, University of Oregon Medical School, Portland, Ore. 97201. (Reported by C. Donald Nelson, Crippled Children's Division.)
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: A developmental standardized evaluation manual that can be used clinically for objective assessment of speech and language levels will be published, together with a complete test kit. Preliminary findings of certain aspects of the test may be published as journal articles.

SPECIAL GROUPS OF CHILDREN

Physically Handicapped

21-GA-1 A SURVEY OF CHILDHOOD ASTHMA

Purpose: To study the epidemiology of asthma.
Subjects: 2,700 children resident in Aberdeen at a given date and born between 1950 and 1955.
Methods: Medical questionnaires are issued and filled in by all parents or guardians. From these, all possibly asthmatic children are listed, and the child and parents or guardian are interviewed. Child is physically examined and respiratory function testing is carried out. Medical data will be correlated with the sociological information gathered from the survey.
Duration: April 1964-1968.
Investigator(s): R. G. Mitchell, M.D., Professor of Child Health; Blanche M. Dawson, M.B., Research Fellow in Child Health; and Raymond Illsley, Professor of Sociology, University of Aberdeen, Foresterhill, Aberdeen, Scotland.
Cooperating group(s): Association for the Aid of Crippled Children, New York.

21-GA-2 NATIONAL SURVEY OF THE FACILITIES FOR FURTHER EDUCATION, TRAINING, AND EMPLOYMENT OF SCHOOL LEAVERS WITH SEVERE OR MULTIPLE HANDICAPS

Purpose: To survey the nationwide facilities for school leavers with severe or multiple handicaps.
Subjects: All pupils with severe or multiple handicaps who are now spending their final year at school and young people with severe or multiple handicaps who left school two years ago.
Methods: A questionnaire will be devised for completion by teachers aiming to elicit their views of the nature of the child's handicap in relation to his potentiality for further training and eventual employment. On the basis of the replies, the research team will formulate an operational definition for selecting the subjects, and their "fate" will be followed through to investigate how far plans made are being translated into practice. The retrospective study will trace back how far arrangements, recommended as suitable three years ago, were found to be practicable.
Duration: January 1967-December 1970.
Investigator(s): Stanley Gooch, B.A., Senior Research Officer, National Bureau for Co-operation in Child Care, Adam House, 1 Fitzroy Square, London, W.1., England. (Reported by M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Co-operation in Child Care.)
Cooperating group(s): All schools for pupils with severe or multiple handicaps; Ministry of Labour and Youth Employment Officers, Department of Education and Science; Ministry of Health.
Publication: Probably in Studies in Child Development (British).

21-GA-3 NATIONAL STUDY OF PHYSICAL, SENSORY, AND MULTIPLE HANDICAPS IN A NATIONAL COHORT OF CHILDREN

Purpose: To make a detailed and comprehensive study on a national scale of a representative sample of seven-year-olds who have physical handicaps, defects of the special senses, and those who are multiply handicapped; to compare the perinatal history of the handicapped groups with that of the main sample of children, using suitable statistical techniques which allow for the collateral effect of socio-economic and environmental (post-natal) variables; and to select a sub-sample of handicapped children for subsequent more intensive and individual study, either on a national or on a regional basis.
Subjects: Those children from the National Child Development Study (1958 cohort) who are, at the age of seven, suffering from physical, sensory, or multiple handicaps.
Methods: Analysis of the comprehensive medical, educational, and sociological data available on all the children at the age of seven, as well as the data from the perinatal survey.
Duration: January 1967-January 1968.
Investigator(s): E. Alberman, M.D., D.C.H., Research Medical Officer, National Bureau for Co-operation in Child Care, Adam House, 1 Fitzroy Square, London, W.1., England. (Reported by M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Co-operation in Child Care.)
Cooperating group(s): National Fund for Research Into Crippling Diseases.

21-GC-1 MEASUREMENT OF BEHAVIORAL AND INTELLECTUAL PROBLEMS IN CHILDREN WITH SEIZURES

Purpose: To study the finer central nervous system disorders in children with epilepsy and the interaction of environmental and organic factors.
Subjects: Children referred for evaluation of seizure disorders to the Seizure Clinic, Johns Hopkins Hospital.
Methods: Children will have a routine psychometric, neurologic, and sociological evaluation carried out on a standardized protocol based on that currently in use by the Johns Hopkins Child Growth and Development Clinic. This evaluation can then be used against normal and other chronic disease controls already investigated by the Child Growth and Development Study. Two hundred children should be identified within the first year and will be followed for a period of two years, to observe the evolution of any behavioral or psychological problems and to establish control over this evolutionary process.
Duration: July 1966-June 1969.
Investigator(s): Samuel Livingston, M.D., Project Director, Seizure Clinic, and Dennis Whitehouse, M.D., Assistant Professor of Pediatrics, Project Coordinator, Seizure Clinic and Pediatric Coordinator, Child Growth and Development Study, Johns Hopkins Hospital, Baltimore, Md. 21205.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-GC-2 AN INVESTIGATION OF NEUROLOGICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS RELATED TO EMPLOYABILITY OF PERSONS WITH EPILEPSY

Purpose: To study employment problems of persons with epilepsy in order to isolate some of the significant variables determining "employability" or "employment readiness," and ultimately, vocational success or failure.

Subjects: An adult employed and an adult unemployed group; also a prevocational group of junior or senior year high school students or persons graduated within the previous six-month period ranging in age from 17 to 19.
Methods: Data were obtained on: convulsive disorder, psychological status, occupational status, attitudes, employee information, and vocational action or motivation. Psychological battery included WAIS, Bender, Bender-Recall, Minnesota Percepto-Diagnostic, Halstead-Reitan Neuropsychological Battery, CPI, EPPS, Jenkins Interest Test, Work Values, Manifest Anxiety Scale, and Employment History Interview. Neurological evaluation consisted of clinical neurological examination, seizure history, and EEG.
Findings: Significant differences between employed and unemployed adult epileptics on a substantial number of measures that relate to employability suggest a continuum of employability from very poor employability prognosis to very good prognosis. Social adaptabilities appear to be as important as seizure control and perhaps even more important in the final outcome.
Duration: January 1964-December 1966.
Investigator(s): R. D. Dennerll, Ph.D., Executive Director, Michigan Epilepsy Center, 10 Peterboro, Detroit, Michigan 48201. (Reported by Melvin L. Schwartz, Ph.D., Chief of Neuropsychology, Michigan Epilepsy Center.)
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Epilepsia (in press).

21-GC-3 PSYCHOLOGICAL IMPLICATIONS OF CYSTIC FIBROSIS AND OTHER CHRONIC DISEASES OF CHILDHOOD

Purpose: To determine the nature of psychological problems and the unmet needs of cystic fibrotic children and their parents; to discover ways in which psychiatrists, other physicians, and rehabilitation agencies could help in the overall management of patients with this disorder.
Subjects: Six girls and five boys, ages 4-1/2 to 19, attending the Cystic Fibrosis Clinic of Winnipeg Children's Hospital, and their parents.
Methods: Psychiatric assessment was made on basis of detailed individual interviews with patient and parents. Interview technique varied with age of child and his verbal capacity. With younger children, play equipment was used to facilitate communication. Child's psychological conflicts were explored through a study of his fantasies in relation to play material, dreams, wishes, earliest memories, and drawings. Interviews with parents were child-centered, and special attention was paid to developmental milestones of the child. Emphasis was then placed on parents' marital relationships, parental attitudes in regard to child's illness, influence of child's illness on family situations, and overall adjustment of parents to each other, the child, fellow workers, neighbors, and relatives. In addition, each child was assessed by a psychologist, using three batteries of tests.
Findings: Data indicate that these children are of average or superior intelligence and that the illness causes major psychological problems both for the patient and the family group. Among the children, problems were predominantly depressive in nature. There was a high incidence of psychiatric illness among the parents which may be related to the child's illness, and which seems to have a marked destructive effect on the family unit.
Duration: Not reported-June 1967.
Investigator(s): Robert H. Lawler, M.D., Chief of Psychiatry, Winnipeg Children's Hospital, and Assistant Professor, Department of Psychiatry, University of Manitoba, Winnipeg, Manitoba, Canada.
Cooperating group(s): Department of National Health and Welfare of Canada.
Publication: The Canadian Medical Association Journal 94:1043-1046, May 14, 1966.

21-GC-4 THE EFFECTS OF CEREBRAL LESIONS IN CHILDREN ON PSYCHOLOGICAL TEST PERFORMANCE

Purpose: To discover relationships between psychological test data and known cerebral lesions; to illustrate the pattern of abilities and deficits in the child classified as having minimal brain dysfunction; and to provide normative data on a large number of abilities over the 5- to 14-year-old range.

Subjects: Children with neurological evidence of brain lesions and children with learning or perceptual problems.

Methods: Extensive neuropsychological test battery, utilizing many of the Reitan tests, is administered by test technicians. Included in the battery are tests of motor, sensory, verbal, performance, and reasoning skills. Results are punched on IBM cards and a profile printed out in standard scores by computer. Program takes into account mean and standard deviation for each of the 106 sub-test scores for each chronological age. Diagnosis of the presence and/or type of brain lesion is made on the basis of profile only.

Findings: Unique patterns of abilities and deficits have been associated with various neurological lesions and with symptoms such as seizures, hyperactivity, and dyslexia.

Duration: March 1965-1975.

Investigator(s): Robert M. Knights, Ph.D., Assistant Professor of Psychology, University of Western Ontario, London, Ontario, Canada.

Cooperating group(s): Ontario Mental Health Foundation; Children's Psychiatric Research Institute.

Publication: Research Bulletin Nos. 12 and 20, Department of Psychology, University of Western Ontario; articles planned in various psychological journals.

21-GC-5 EARLY EGO DEVELOPMENT OF CHILDREN BLIND FROM BIRTH

Purpose: To study the unique adaptive problems of infants blind from birth in the areas of human attachments, object concept, relationship to inanimate objects, gross motor development, language, and development of the sense of self.

Subjects: 12 to 15 babies.

Methods: Twice monthly home visits for observations. Film samples are recorded and analyzed for each sector of development.

Findings: In the area of prehension, there is strong evidence that grasping mode follows the biological timetable, but adaptive hand behavior, in the absence of vision, follows a unique pattern. There is no equivalence of sound for vision in constructing an object concept during first three quarters of first year. Sound does not confer substantiality to the object. An infant blind from birth does not search for or reach for an object on sound cue alone until last quarter of first year, at which time the schema of prehension and hearing are coordinated.

Duration: February 1960-June 1969.

Investigator(s): Selma Fraiberg, M.S.W., Associate Professor of Child Psychoanalysis; Ralph Gibson, Ph.D., Associate Professor of Psychology; and Marguerite Smith, Ph.D., Research Associate, Children's Psychiatric Hospital, School of Medicine, University of Michigan, Ann Arbor, Mich. 48104.

Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publication: *Psychoanalytic Study of the Child*, 1967. Object concept material to be reported in 1970.

21-GC-6 MINIMAL BRAIN DYSFUNCTIONS--NEUROLOGIC SUB-CATEGORIES

Purpose: To study the intellectual, learning, physiologic, and behavioral characteristics of children diagnosed as having minimal brain dysfunction.
Subjects: 72 children with minimal brain dysfunction--24 each of hyperactive, hypoactive, and "isoactive" children. Each group is divided into three neurological groups--positive, equivocal, and negative; 24 normal children and eight children with school phobias matched as controls.
Methods: Conditioning techniques, a motor impulsivity test, and an orienting test consisting of 10 tones--9 alike and one different; during orienting test, continuous records are obtained of electrocortical activity, heart rate, skin resistance, respiration, and muscle action potentials.
Findings: The children with minimal brain dysfunction appear to be remarkably unreactive in skin resistance and, relative to normals, slow in conditioning. The unreactivity in galvanic responses may not be closely related to levels of arousal as measured by the EEG or heart rate.
Duration: June 1966-September 1969.
Investigator(s): John E. Peters, M.D., and Roscoe A. Dykman, Ph.D., Professors; Bart H. Danford, Ph.D., Assistant Professor; and Sam Clements, Ph.D., Associate Professor, Department of Psychiatry, University of Arkansas Medical Center, Little Rock, Ark. 72201.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Archives of General Psychiatry 16:281-285, 1967; manuscript also submitted to Conditional Reflex.

21-GC-7 CHILD AMPUTEES: DISABILITY OUTCOMES AND ANTECEDENTS

Purpose: To explore associations between various antecedent factors and differences in social and physical outcomes in amputees who have undergone treatment.
Subjects: Former patients of the Area Child Amputee Center, Grand Rapids, Michigan.
Methods: Sample will be surveyed 1 to 20 years after treatment. Patterns of self-care, use of health facilities, and roles of the disabled will be described. Characteristics of the patients, their social environments, treatment experiences, and organization and delivery of their care will be investigated through existing records and new reports.
Duration: Not reported.
Investigator(s): Donald C. Smith, M.D., Professor; Harold Decker, M.D., Assistant Professor; G. E. Ned Sharples, Assistant Professor; and Edward A. Duffy, Research Associate, Maternal and Child Health, Department of Health Development, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-GE-1 A STUDY TO DETERMINE THOSE FACTORS WHICH MAY INTERFERE WITH EFFECTIVE HOME TREATMENT OF CHILDREN WHO HAVE RHEUMATOID ARTHRITIS, WITH IMPLICATIONS FOR IMPROVING THE INSTRUCTION AND GUIDANCE AVAILABLE TO THEIR PARENTS

Purpose: To determine how effectively parents of a selected group of children with rheumatoid arthritis have been able to carry out the treatment and appropriate home care which had been advised for their children.

Subjects: 13 children who have been treated for rheumatoid arthritis at the Children's Rheumatism Clinic at the University of Minnesota Hospitals.
Methods: Patients were thoroughly evaluated medically and functionally and an estimate made of the types of activities which should be carried out by the patient and by the patient's family in the home. An interview was conducted in the patient's home, and a brief questionnaire was mailed to the public health nurses who had visited or were currently visiting any of the children, to determine their understanding and knowledge of the effectiveness of the home treatment prescribed.
Findings: Clinic appointments were regularly kept; parents were generally satisfied with the type of instruction given and with opportunities to discuss problems with the clinical physician. Physical home environments seemed satisfactory, and continuing guidance of parents seemed indicated on a home care basis.
Duration: 1965-1966.
Investigator(s): M. Murphy, Ph.D., Professor and Director, Public Health Nursing, School of Public Health, University of Minnesota, Minneapolis, Minn. 55455.

21-GF-1 APPLICABILITY OF THE PRINCIPLES OF DYNAMIC GROUP PSYCHOTHERAPY TO THE TREATMENT OF THE ADJUSTMENT PROBLEMS OF PARENTS OF CHILDREN WITH CEREBRAL PALSY

Purpose: To evaluate effects of dynamic group psychotherapy on adjustment problems of parents of children with cerebral palsy; to test assumption that ways in which parents adjust to their child's handicap will be a function of their own psychodynamics.
Subjects: 28 applicants from total population of parents on service list of a county United Cerebral Palsy agency.
Methods: Applicants were screened to evaluate their need for and ability to utilize group therapy. Three series of weekly two-hour group therapy sessions were conducted and tape-recorded. Evaluation will focus on utilization by parents of an opportunity for self-exploration.
Findings: Meaningful utilization of the group therapy vehicle developed in ways significant in clarifying relationships between the personal psychodynamics of parents and their mode of adjustment to the physical handicap in their child.
Duration: 1963-1967.
Investigator(s): Verda Heisler, Ph.D., Clinical Psychologist in Private Practice, Westview Psychology Offices, 3636 First Ave., San Diego, Calif. 92103.
Cooperating group(s): United Cerebral Palsy of San Diego County; United Cerebral Palsy Research and Educational Foundation, Inc.
Publication: Book in preparation.

21-GG-1 PLANNING FOR A PROSPECTIVE STUDY OF HANDICAPPED CHILDREN AND ALL OTHER MEMBERS OF THE PRIMARY FAMILY UNIT

Purpose: To develop a research design and a multi-disciplinary team for a prospective study of multiply handicapped children and all members of the primary family unit.
Subjects: Handicapped children and members of the family seen at the University of Illinois Research and Educational Hospitals and the Illinois Division of Services for Crippled Children.
Methods: The design will be replicated simultaneously with multi-comparison groups of handicapped children and their families. The

primary disciplines are pediatrics, psychiatry, psychology, sociology, and education.
Duration: August 1966-July 1967.
Investigator(s): Aubrey L. Ruess, Ph.D., Project Director; Edward F. Lis, M.D., Co-Project Director; and I. M. Rosenthal, M.D., Research Pediatrician, Division of Services for Crippled Children, University of Illinois, 840 S. Wood St., Chicago, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

Mentally Retarded

21-HC-1 DEVELOPMENT OF BASIC MOTOR ABILITY TESTS FOR RETARDATES: TOWARDS A BASIS FOR SKILL TRAINING

Purpose: To develop a prototype battery of basic abilities tests for retardates by modifying existing tests of psychomotor and physical proficiency abilities; to develop "ability profiles," and explore use of such profiles in predicting trainability and performance on meaningful retardate tasks.
Subjects: 30 male retardates, ages 6 to 25, and 11 female retardates, ages 8 to 24; median age for both sexes was 13; 18 of the subjects lived at Jewish Foundation for Retarded Children, and 23 were cared for there during the day.
Methods: Three psychomotor and eight physical proficiency tests were adapted to retardate limitations. They were tests of static strength, explosive strength, extent flexibility, gross body equilibrium, dynamic flexibility, manual dexterity, reaction time, and arm-hand steadiness. Retardates were tested in groups of three, getting two scores on each test, in a fixed time period. If the subject did not respond in the time allowed, he was considered "untestable" for that trial. As an adjunct to the testing, basic subject information was collected on height, age, past I.Q. scores, housing status, sex, and American Association on Mental Deficiency etiological classification.
Findings: Retardate motor abilities may be assessed by modifying existing tests of basic motor abilities, and administering them to retardate populations; retardate performance on different tests may differentially relate to a variety of retardate characteristics such as age, sex, I.Q., housing, and etiology; and retardate "ability profiles" may be developed as predictors of task trainability and performance.
Duration: July 1966-January 1967.
Investigator(s): Edwin H. Elkin, Ph.D., Research Scientist, American Institutes for Research, 8555 - 16th St., Silver Spring, Md. 20910; and Erwin Friedman, Ph.D., Director, Jewish Foundation for Retarded Children, Inc., 6200 - 2nd St., N. W., Washington, D. C. 20011.
Publication: American Institutes for Research monograph, February 1967.

21-HC-2 THE PERCEPTION BY RETARDATES AND NORMALS OF THE NUMEROSITY OF TACHISTOSCOPICALLY PRESENTED DOT PATTERNS

Purpose: To determine the "channel capacity" of different groups of subjects (i.e., that point where more than 10 percent errors are made in correct perception of number of dots exposed for one second) on a dot perception task; also, to measure effect of varying length of presentation.

Subjects: Educable retardates, equal M.A. (nine-year-old) normals, equal C.A. (14-year-old) normals, and college students.
Methods: Dots are presented on a screen for one second. Number of dots range from 3 to 10, in random order. In one experiment, half the dots are "grouped," half are "ungrouped." In another experiment, not only number of dots, but length of presentation time will be varied.
Findings: Retardates and equal M.A. normals have a channel capacity on this task of about four or five dots, while equal C.A. normals and college students are at about six dots. Grouping of dots has no reliable effect.
Duration: January 1966-November 1967.
Investigator(s): Herman H. Spitz, Ph.D., Director of Research; David L. Hoats, M.A., and Edward A. Holden, Jr., M.A., Research Scientists, Edward R. Johnstone Training and Research Center, Bordentown, N. J. 08505.
Cooperating group(s): State of New Jersey.
Publication: Probably *American Journal of Mental Deficiency*.

21-HE-1 THE MEDIATION TRAINING OF MENTALLY RETARDED CHILDREN

Purpose: To overcome mentally retarded children's mediational deficiency by administering a learning set training program prior to introduction of the mediation task.
Subjects: Mentally retarded children with mental ages between five and eight years.
Methods: Assessment of children's mediation deficit is made by noting whether they can mediate on a paired-associates, three-stage chaining task (AB, BC, AC). Children who are unable to mediate are then administered learning set training until they reach a criterion of three perfect discriminations. The mediation task is then re-administered. A control group of non-mediators is given a series of operant tasks.
Findings: Children who received learning set training showed post-mediation relative to children who underwent operant training.
Duration: June 1966-June 1967.
Investigator(s): Ronald K. Penney, Ph.D., Professor and Acting Chairman, Department of Psychology, University of Waterloo, Waterloo, Ontario, Canada.
Cooperating group(s): Ontario Mental Health Foundation.
Publication: Probably *Journal of Experimental Psychology*.

21-HE-2 EFFECT OF SENSORY MOTOR ACTIVITY ON PERCEPTION AND LEARNING IN THE NEUROLOGICALLY HANDICAPPED CHILD

Purpose: To test the effect of sensory motor training on perception, language ability, and academic learning in children with learning disorders; to further identify types of perceptual-learning disorders and the possible differential response of each type to sensory motor training.
Subjects: 32 to 40 children.
Methods: Two classes of educationally handicapped children will be given a battery of individual tests at the beginning and end of each of two school years. Alternate classrooms serve as control groups. Sensory motor training that is basically neurophysiological is given both in classroom time and individually. Efforts will be made to enhance central nervous system's integration through hypothesized brain mechanisms. It is hoped this study will bring to the field of education that which the brain scientists have learned about how the brain functions in relation to perceptual learning.
Duration: July 1966-June 1968.

Investigator(s): A. Jean Ayres, Ph.D., Department of Education of Exceptional Children, University of Southern California, University Park, Los Angeles, Calif. 90007. (Reported by Ernest P. Willenberg, Ph.D., Director of Special Education, Los Angeles City Schools.)

21-HF-1 AUTONOMIC DYSFUNCTION IN PHENYLKETONURIA

Purpose: To determine whether the biochemical disturbances in phenylketonuria produce predictable manifestations of impairment of autonomic neurohumoral mechanisms (defective adrenergic and cholinergic outflow); also, to contrast the ability of phenylketonuric children to interact with an examiner with the ability of psychotic and normal children.
Subjects: Hospitalized psychotic, phenylketonuric, and normal children drawn from a settlement house.
Methods: Autonomic measures and patterns of pupillary dilatation and constriction will be obtained. Examination will be made of the relationship of observable behavioral symptoms of psychosis in a group of phenylketonuric children to patterns of adrenergic and cholinergic outflow, when compared with phenylketonuric children who show no such symptoms, psychotic-autistic children who do not have phenylketonuria, and normal children.
Duration: September 1966-March 1968.
Investigator(s): Ira M. Steisel, Ph.D., Chief Psychologist, St. Christopher's Hospital for Children, 2603 N. 5th St.; and Leonard S. Rubin, Ph.D., Head, Psychobiology Unit, Eastern Pennsylvania Psychiatric Institute, Henry and Abbottsford Rd., Philadelphia, Pa. 19133.
Cooperating group(s): Children's Bureau, Eastern State School and Hospital; Orthopedic Foundation of Philadelphia; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: *Journal of Consulting Psychology*, in press, 1967.

21-HH-1 EFFECTIVENESS OF FILMSTRIPS IN TEACHING HYGIENE TO TRAINABLE SECONDARY SCHOOL STUDENTS

Purpose: To evaluate the effectiveness of 4 out of 10 filmstrips which have just been prepared by the Harris County Center for the Retarded.
Subjects: 60 trainable students, ages 14 through 18, attending the school of the Harris County Center for the Retarded.
Methods: The 60 students are distributed in four comparable classes. One class receives the filmstrip and related training, another the filmstrip only, the third, the training only, and the fourth acts as a control. Effectiveness of each method will be determined by a questionnaire to the parents.
Duration: November 1966-spring 1968.
Investigator(s): Mary Martha Thompson, Ph.D., Director of Children's Services, Harris County Center for the Retarded, 3550 W. Dallas, P.O. Box 13403, Houston, Tex. 77019.
Cooperating group(s): U. S. Department of Health, Education, and Welfare.
Publication: Results will be available with the guide book which is being prepared to accompany the filmstrips; possibly a publication.

21-HI-1 A COOPERATIVE DEMONSTRATION WORK EXPERIENCE FOR MENTALLY RETARDED ADOLESCENTS

Purpose: To demonstrate how coordinated efforts among Crossroads Rehabilitation Center, the Indianapolis Public School System, and the Indiana State Vocational Rehabilitation Division can assist students in making a more successful transition from school to the employment setting.
Subjects: 80 male and female educable mental retardates selected from public school special education classes through the use of ratings on the Milwaukee Jewish Vocational Services' rating scale for employability and appropriate psychometric data.
Methods: Subjects spend half-days in school and half-days in five basic work experience programs at Crossroads. Small group counseling activities focused on adjustment to work and development of good worker attitudes and behavior are conducted regularly. Evaluative data collected for subjects will be used to assess utilized methods. Placement and follow-up of program participants and regular special education students will permit comparisons concerning subsequent employment of adolescent retardates.
Duration: Not reported.
Investigator(s): Shelley C. Stone, Ph.D., Director of Research, Crossroads Rehabilitation Center, Inc., 3242 Sutherland Ave., Indianapolis, Ind. 46205.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

21-HJ-1 TRANSITION-BUFFER UNIT FOR MENTALLY RETARDED

Purpose: To provide an intensive training area for improving the level of adjustment of those patients who show potential, and to prevent "building regression" in those patients who temporarily decompensate.
Subjects: Groups of eight ambulatory and semi-ambulatory retarded children.
Methods: Behavioral shaping methods are used which emphasize group adjustment and self-care. A multidiscipline team develops treatment programs, establishes reinforcement schedules, and evaluates the progress of the patient.
Findings: A significant reduction in "building regression" has been achieved, and several groups have been promoted to higher buildings by being trained in the Buffer Unit.
Duration: September 1965-indefinite.
Investigator(s): J. Iverson Riddle, M.D., Superintendent, and Billie B. White, R.N., Nurse Supervisor, Western Carolina Center, Morganton, N. C. 28655. (Reported by James C. White, Jr., Ph.D., Director of Psychology and Special Projects, and Coordinator, Western Carolina Center.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Progress reports will be sent to National Institute of Mental Health.

21-HJ-2 STUDIES OF THE STIMULUS PROPERTIES OF REINFORCEMENT

Purpose: To evaluate the discriminative and/or exciting properties of reinforcement.
Subjects: Institutionalized retarded adolescent girls, ages 11 to 16.
Methods: Stable responding is established on a Lindsley manipulandum through use of either ratio or internal reinforcement schedules. Once

stable responding is achieved, subjects are placed on extinction. When the subject's rate has decreased so that a specific pause criterion is met, reinforcement is delivered. Responses made during a one-minute post-reinforcement period are recorded and compared with a control period.
Findings: The first reinforcement during extinction results in an immediate resumption of responding. This effect ranges from transitory to rather permanent.
Investigator(s): Fred Girardeau, Ph.D., and Joseph Spradlin, Ph.D., Research Associates, Bureau of Child Research, Parsons State Hospital and Training Center, Parsons, Kans. 67357.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Work will be published in the Journal of Experimental Child Psychology and the American Journal of Mental Deficiency.

21-HJ-3 RESIDENTIAL UNIT CARE PLAN FOR RETARDED CHILDREN

Purpose: To provide personalized nursing care to 50 mentally retarded children under five years of age.
Subjects: 50 mentally retarded pre-school children in residence at Newark State School.
Methods: Individualized care of these retardates is accomplished by an increase in staffing on this unit, with one attendant or nurse assigned to four to six children on a continuing basis. The attendant administers comprehensive nursing care with emphasis on assisting the child to learn self-care skills. The child care worker seeks to meet not only the young retardate's physical needs, but his social, emotional, and spiritual needs as well.
Findings: Children are responding to this special type of nursing care. For example, children who were crib patients and did not react to those about them are now placed on mats, sitting in chairs, or using walkers. These young children also react by a smile or extending their arms to the attendant or nurse who cares for them. Certain children are gradually gaining some degree of independence in mastering the simple skills of activities of daily living.
Duration: October 1966-May 1971.
Investigator(s): Frank R. Henné, M.D., Director, Newark State School, 529 Church St., Newark, N. Y. 14513.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: No plans for publication at present time.

21-HJ-4 USE OF VOLUNTEERS AS TRAINERS OF RETARDED CHILDREN

Purpose: To train volunteers in specialized positions formerly held by highly trained professionals; to demonstrate methods of recruiting, selecting, training, and supervising sub-professionals as extensions of regular professional staff; and to evaluate effects on volunteers and retardates.
Subjects: Volunteers of varied educational and socio-economic levels, ages 17 to 70.
Methods: Volunteers are recruited through existing volunteer services at Austin State School. They are trained through workshops and individual counseling, and are assigned to one of four specialized programs working with retarded children. Indices of change will be analyzed in the overall volunteer program, in individual volunteers, and in retardates.

Duration: March 1966-December 1968.
Investigator(s): Philip Roos, Ph.D., Superintendent, Austin State School, P.O. Box 1269, Austin, Tex. 78767.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Several articles have been submitted for publication; others in preparation.

21-HJ-5 A DEVELOPMENTAL PROGRAM FOR THE SEVERELY RETARDED

Purpose: To provide an enrichment experience for severely and profoundly retarded children in the areas of self-help, social, motor, and language skills.
Subjects: 135 severely and profoundly retarded residents with a mean age of 9.8.
Methods: Baseline measurements are taken on a Behavioral Rating Scale especially developed for this program, and children are divided into groups consistent with their developmental abilities. Behavioral modification techniques are used, treating desired behaviors as operants which are approximated and differentially positively reinforced. This is done in conjunction with demonstration and facilitating imitative behaviors. For children of profound retardation, particularly with multiple handicaps, a sensory program has been instituted consisting of kinesthetic, auditory, visual, olfactory, and gustatory stimulation. Passive and active exercises to facilitate developmental crawling are being used. In addition, various new techniques are utilized by attendant personnel.
Findings: Considerable improvement in some children and some degree of improvement in most of the children.
Duration: February 1966-January 1971.
Investigator(s): Gareth D. Thorne, M.A., Superintendent, Arizona Children's Colony, P.O. Box 1467, Coolidge, Ariz. 85228.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles planned; annual reports will cover relevant information such as method, results, and discussion of findings.

21-HJ-6 CHANGES IN THE LEVEL OF FUNCTIONING OF MENTALLY RETARDED CHILDREN AND THEIR FAMILIES MEASURED AT THE POINT OF ENTRY INTO HOSPITAL AND ONE YEAR LATER: A STUDY OF CHILDREN ADMITTED FROM METROPOLITAN TORONTO TO THE ONTARIO HOSPITAL SCHOOL, ORILLIA, IN ONE YEAR

Purpose: To describe the characteristics of all the children admitted to a long-term residential institution for retardates (Ontario Hospital School, Orillia) from metropolitan Toronto for a period of one year and the characteristics of their families; to measure intellectual and social changes in these individuals over time; to measure changes in the family functioning over time; to relate institutionalized subject changes to characteristics of their families; and to relate family functioning changes to subject characteristics.
Subjects: 120 children admitted to the Ontario Hospital School, Orillia, between April 1965 and June 1966 and their families, and a contrast group consisting of 40 children matched with the test group for age, mental ability, sex, and mongolism, and their families.
Methods: Family interviews are conducted, children are administered psychological tests, and records and reports are obtained from other agencies and medical sources.

Duration: April 1965-April 1968.
Investigator(s): J. B. Fotheringham, M.D., Clinical Director, Mental Retardation Center, 2 Surrey Place, Toronto, Ontario, Canada.
Cooperating group(s): Ontario Mental Health Foundation.
Publication: Publications planned in appropriate journals.

21-HK-1 FAMILY THERAPY WITH PARENTS OF RETARDED ADOLESCENTS AND GROUP THERAPY WITH ADOLESCENT RETARDATES THEMSELVES

Purpose: To change family rejection of retarded adolescents to a positive and constructive relationship; to enable adolescents to apply themselves to tasks and become self-supporting.
Subjects: Retarded adolescents, parents, and siblings.
Methods: Therapy sessions with parents; siblings included at times. Separate group sessions are held with adolescents.
Findings: Girls showed growth and maturity, achieved greater freedom to acquire skills, increased emotional control, and greater sociability.
Duration: 1965-August 1966.
Investigator(s): Gusta P. Thaun, Ph.D., Private Practice, 231 E. 76th St., New York 10021; and Queens County Neuropsychiatric Institute, 37-64 72nd St., Jackson Heights, N. Y. 11372.
Publication: Reported as part of panel discussion on retardation, International Congress on Adolescence, University of Edinburgh, Summer 1966.

Emotionally Disturbed and Mentally Ill

21-JA-1 IDENTIFICATION OF EMOTIONAL DISTURBANCE IN CHILDREN

Purpose: To study whether clinical psychologists can discriminate "blindly" between emotionally disturbed children and matched normal controls; to gather objective norms by which to differentiate between experimental and control groups.
Subjects: 100 boys and girls selected by teachers, public health nurse, and pediatrician as having signs of emotional disturbance; 100 matched control children with no signs of emotional disturbance.
Methods: Children are evaluated through a standard test battery, including DAP, Peabody, Frostig, ITPA, WRAT, WISC, Rorschach, and Missouri Children Picture Series.
Duration: September 1966-June 1967.
Investigator(s): Luciano L'Abate, Ph.D., Professor of Psychology, Georgia State College, 33 Gilmer St., S.E., Atlanta, Ga. 30303.
Cooperating group(s): School health personnel; Georgia Health Department.
Publication: Submitted to professional journals.

21-JB-1 CHILD PSYCHIATRIC EMERGENCIES: CLINICAL CHARACTERISTICS AND FOLLOW-UPS

Purpose: To examine demographic and clinical data of child psychiatric emergencies and to compare them to similar data of a control group of emotionally disturbed children referred for child psychiatry service but considered non-emergencies; to assess results of emergency evaluations in terms of diagnosis, disposition, and outcome of recommended action.

Subjects: The 170 emergency cases seen at the Child Psychiatry Clinic of University Hospitals, Cleveland, during a recent two-year period, and a control group of 170 children randomly selected from regular clinic referrals during same period of time.
Methods: Records of emergency and non-emergency referrals were examined and compared in terms of demographic characteristics, referral source, symptomatology, duration of illness, diagnostic impression, and recommendation. Agencies and hospitals involved in caring for the child and his family following the emergency evaluation provided follow-up information. Most families who had failed to follow through with recommendations could be interviewed regarding present functioning of their child.
Findings: Comparison of data from emergency and control groups revealed some significant differences: 80 percent of the emergencies were adolescents (ages 12 to 17), while 45 percent of the controls were in the same age range. Boys made up one-third of the emergencies; girls, two-thirds. These proportions were reversed in the control group. Acute mental symptoms (e.g., suicidal behavior, psychotic manifestations, school refusal, aggressive outbursts) were more common among the emergencies. The latter, however, showed as much evidence of underlying, chronic individual and family maladjustments as did the control group. Suicidal attempts or threats had prompted close to half of all emergency calls with a ratio of three females to one male, 30 percent of the emergencies were hospitalized immediately, while 54 percent were referred for further outpatient study. Analysis of follow-up data revealed that in the emergency group there was only a minority of basically healthy children with acute emotional symptoms where the therapeutic intervention seemed truly preventive.
Duration: July 1965-December 1966.
Investigator(s): Ake Mattsson, M.D., Instructor in Child Psychiatry, and James W. Hawkins, M.D. Candidate, Western Reserve University School of Medicine, Cleveland, Ohio 44106.
Publication: Paper for psychiatric journal in preparation.

21-JB-2 THE PRE-HOSPITAL LEISURE TIME ACTIVITIES OF MENTAL PATIENTS

Purpose: To develop an instrument for obtaining from the patient and other sources data about his leisure activities and participation in voluntary organizations before hospitalization; to determine how this information can be used in program planning adapted to the individual patient during and after hospitalization; and to ascertain the relationship of social class and other demographic variables to the leisure activities and organizational participation of hospital clientele.
Subjects: Child, adolescent, and adult patients receiving rehabilitation services in a state mental hospital, and patients in similar age categories not receiving such services.
Methods: Demographic and diagnostic data are obtained from patient records, and patients are interviewed regarding their pre-hospital leisure activities and preferences and participation in voluntary organizations. The social position of each patient is determined according to the Hollingshead Two-factor Index of Social Position, and patients receiving rehabilitation services are compared with patients of similar age and sex who are not receiving rehabilitation.
Duration: July 1966-June 1967.
Investigator(s): Irving Babow, Ph.D., Research Social Scientist; Bessie Clark, O.T., Chief, Rehabilitation Department; and Alonza C. Johnson, M.D., Chief, Research Department, Napa State Hospital, Imola, Calif. 94558.
Publication: Publication is planned in a psychiatric journal and a rehabilitation journal. A copy of the report will also be available from the Research Department, Napa State Hospital.

21-JB-3 DESCRIPTION OF THE PERSONALITY STRUCTURE OF THE EMOTIONALLY DISTURBED CHILD IN TERMS OF PERFORMANCE TESTS AND QUESTIONNAIRES

Purpose: To replicate earlier findings with a similar age group; to identify personality dimensions that discriminate between "normal" children, clinic children, and children (judged emotionally disturbed) in institutions.
Subjects: 230 12-year-old children, 100 of whom are in institutions or clinics.
Methods: Performance tests and questionnaires; factor analysis, factor extension analysis, and analysis of subjects into groups.
Findings: Four factors, apart from intelligence, show marked association with criteria.
Duration: 1964-1967.
Investigator(s): John D. Hundleby, Ph.D., Associate Professor of Psychology, New York University, New York, N. Y. 10003.
Cooperating group(s): City College Research Fund; Arts and Science Research Fund, New York University; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Monograph planned.

21-JB-4 RECIPROCITY AND COERCION: TWO FACETS OF SOCIAL INTERACTION

Purpose: To investigate social interaction within the framework of social learning procedures (reinforcement and modeling); particularly, to relate variations in reciprocity and coercion to the formation of deviant behaviors in children.
Subjects: Families referred to outpatient facilities because of problems with deviant children.
Methods: Observation and behavior modification procedures introduced into the home.
Findings: There are very high correlations among members of a family in terms of getting and receiving positive social reinforcements. The persons within the family (as a social system) who give the highest ratio of positive social reinforcers also receive the highest ratio of reinforcement. This kind of reciprocity does not hold for adverse consequences.
Duration: January 1967-not reported.
Investigator(s): Gerald R. Patterson, Ph.D., Professor of Psychology, University of Oregon, Eugene, Ore.
Publication: Chapter in preparation for book. J. Michels and R. Neurigner (Eds.). McGraw Hill, 1968.

21-JC-1 ADULT ADJUSTMENT OF ADOLESCENT PATIENT GROUPS

Purpose: (1) To compare the relative contribution psychiatrically disturbed adolescents and their non-disturbed patient peers make to positive adult mental health; (2) to determine extent to which adolescent levels of disturbance contribute to adult mental health; (3) to determine relationship of demographic variables of adolescent psychiatric and non-psychiatric patient groups to adult mental health; and (4) to assess significance of adolescent interpersonal relationships (parent-child, sibling, peer, and parent-parent) to adult mental health.
Subjects: 800 white male and female former adolescent psychiatric patients and 200 non-psychiatrically disturbed patient peers. Patients were 13 through 17 years of age at some time in the period of 1938 to 1950 when they were seen at the University of Minnesota Medical Center.

Methods: Subjects will be individually interviewed using a structured interview and given the Minnesota Multiphasic Personality Inventory. Public records will provide another source of information with which to categorize the subjects according to a five-point rating scale of mental health. Medical records will provide data for determining adolescent adjustment.
Duration: June 1966-August 1970.
Investigator(s): A. Jack Hafner, Ph.D., and Wentworth Quast, Ph.D., Associate Professors, Division of Clinical Psychology, University of Minnesota, Minneapolis, Minn. 55455.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-JC-2 EARLY BEHAVIOR PROBLEMS AND LATER REFERRAL FOR MENTAL HEALTH SERVICES

Purpose: To study the relationship of four dimensions of problem behavior (conduct problems, personality problems, inadequacy-immaturity, and socialized delinquency) in kindergarten and first grade children to later referral for mental health services and to socio-economic and school achievement variables.
Subjects: Approximately 4,000 kindergarten and first grade children, 2,000 of whom will be studied at both kindergarten and first grade levels.
Methods: Each child is rated by his teacher near the end of the school year on a problem behavior checklist yielding scores on the four previously noted factor analytically derived dimensions. Scores will be related to criterion variables during course of children's elementary school attendance.
Duration: May 1965-continuing.
Investigator(s): Herbert C. Quay, Ph.D., Research Director, Children's Research Center, and Professor of Psychology, and John S. Werry, M.D., Research Child Psychiatrist, Children's Research Center, and Assistant Professor of Psychiatry, Department of Psychology, University of Illinois, Urbana, Ill. 61801.
Cooperating group(s): Urbana (Ill.) Public Schools; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned.

21-JC-3 THE "THERAPEUTIC" EFFORTS OF EVALUATION PROCEDURES IN A CHILD PSYCHIATRIC CLINIC

Purpose: To assess and make explicit the behavioral variables most subject to "change" following routine intake-evaluation procedures.
Subjects: 50 children referred for psychiatric evaluation to the Division of Child Psychiatry, University of Texas Medical Branch.
Methods: Upon referral to the clinic, the parents of children for whom service is sought are sent a 69-item problem behavior rating scale, to be completed on the basis of the referred child's behavior. When the completed rating scale has been returned to the clinic, the child is given an appointment for a full day's evaluation. (The interval between mailing the blank rating scale and the day of evaluation has been found to be rather constant.) The parents of half the children's group are asked, on the morning of the evaluation, to complete, again, a copy of the behavior rating scale. The parents of the other half of the subject group are required to fill out the scale in the afternoon of the intake day, following the final (feedback) interview with the diagnostic team. Children's rated behavior for both groups is then compared with

the initial ratings. The expectation is that the group whose parents received feedback will show a greater decrease in problem behavior than the control group.
Duration: February 1967-1968.
Investigator(s): Willy A. Kouw, Ph.D., Assistant Professor, and Cherrie L. Wood, Research Assistant, Department of Neurology and Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.
Publication: Article planned in *Journal of the American Academy of Child Psychiatry*.

21-JD-1 ALOPECIA AREATA STUDY

Purpose: To define the relationship, if any, between alopecia areata (and alopecia totalis) and emotional factors.
Subjects: Children up to age 18, diagnosed in the Dermatology Section of the Outpatient Department of Children's Hospital as having alopecia.
Methods: Detailed psychiatric evaluation.
Findings: There is relatively convincing evidence of an association of pre-genital factors with the course and outbreak, varying according to the developmental level.
Duration: 1964-1967.
Investigator(s): Robert D. Mehlman, M.D., Assistant in Psychiatry, Children's Hospital Medical Center and Harvard Medical School, and Senior Psychiatrist, Massachusetts Mental Health Center; and Robert D. Griesemer, M.D., Assistant Professor of Dermatology, Harvard Medical School, Associate in Dermatology, Children's Hospital Medical Center, and Senior Associate in Medicine (Dermatology), Peter Bent Brigham Hospital, Boston, Mass. 02115.
Publication: Report of clinical findings to be published.

21-JE-1 PSYCHOPHYSIOLOGICAL STUDIES OF AUTISTIC CHILDREN

Purpose: To investigate orienting behavior and habituation of orienting behavior to simple sensory stimuli; to evaluate effects of a period of operant training designed to establish social and language behaviors upon measures of orienting; and to analyze background brain wave activity in children with early infantile autism. Measures of the orienting response will be the galvanic skin response, heart rate changes, and the EEG arousal response.
Subjects: 20 children diagnosed as having early infantile autism, and 20 normal children matched for age and sex.
Methods: Visual and auditory stimuli will be used in the habituation procedure. The visual stimulus will be a pure tone. Background EEG data will be collected, and the habituation procedure will be run. This procedure will consist of presenting the habituation stimulus until occurrence of three consecutive non-responses, then changing to a novel stimulus of the same sensory channel. The order of each of the types of sensory stimuli will be counterbalanced so that half the subjects in each group will receive the auditory condition first and the other half will receive the visual condition first. Habituation data will be again obtained after autistic subjects develop language and social behaviors as a function of operant training.
Findings: Pilot data from a few autistic children suggest that, in terms of the GSR measure, these children are more reactive than normal children and are less able to maintain habituation over time. Some autistic children may have no response at all; however, this is not an unusual finding, since some proportion of normals do not have GSR's.

Duration: February 1966-February 1968.
Investigator(s): Martha E. Bernal, Ph.D., Assistant Professor of Medical Psychology; James Q. Simmons, III, M.D., Assistant Professor, and Chief, Children's Inpatient Service; and Paul Naitoh, Ph.D., U. S. Public Health Service Post-Doctoral Trainee, Department of Psychiatry, Neuropsychiatric Institute, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication is planned when research is completed.

21-JE-2 EXPERIMENTAL APPROACH IN THE TREATMENT OF AUTISM

Purpose: To study possible etiologic applications and a specific kind of treatment in children using autistic defenses.
Subjects: Children with autistic defenses under the age of 10.
Methods: Individual children are placed in a room remodeled to provide a sensory deprivation experience. Although constant monitoring by the staff goes on, twice daily contact with the child's therapist also takes place. During the time when the stimulus hunger occurs, the therapist is available for contact.
Findings: Two children, one kept in the deprivation room for 68 days and the other for 40 days, have, after a year following the experimental procedure, maintained close contact with people in their environment. Autistic defenses in the main seem to have been interrupted, and both the children are attempting to speak.
Duration: November 1965-indefinite.
Investigator(s): Marshall D. Schechter, M.D., Professor of Child Psychiatry, and Povl W. Toussieng, M.D., Associate Professor of Child Psychiatry, University of Oklahoma Medical Center, 800 Northeast 13th St., Oklahoma City 73104; and Jay T. Shurley, M.D., Research Professor of Psychiatry, Veterans Administration Hospital, Oklahoma City, Okla.
Cooperating group(s): Clinical Research Center, University Hospital, Oklahoma City.
Publication: Submitted for publication.

21-JF-1 PARENT-CHILD INTERACTION WITH SCHIZOPHRENIC CHILDREN

Purpose: To determine stimulation and interaction patterns of schizophrenic children and their parents; to test hypothesis that for these children there is a breakdown in the reciprocal stimulation in these families and responsiveness resulting in the parents', especially mothers', increased withdrawal and insensitivity to their children.
Subjects: 30 psychotic children, 30 brain-damaged children, and 30 normal nursery school children, ages three to six, and their parents.
Methods: Each family is observed in interaction on three separate occasions. Parents are given seven tasks to perform with their child while two observers take running notes behind a one-way mirror. Interaction is rated on six special rating scales. A social history is obtained from the families, and parents and children are interviewed and tested. Ratings are statistically analyzed, and scales and measures for comparing responses to projective tests have been evolved.
Findings: Parents of psychotics show significantly less sensitivity to their psychotic children. Their behavior is marked by stereotypy and rigidity. Affectively, they withdraw and fail to respond to cues emitted by the child.
Duration: December 1965-November 1968.

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Investigator(s): Ralph Rothstein, Ph.D., Director of Psychology Training, Worcester Youth Guidance Center, 275 Belmont St., Worcester, Mass. 01604.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers presented to Midwestern Psychological Association, May 1966, and Eastern Psychological Association, April 1967.

21-JG-1 FAMILY INTERACTION AND DEVIANT BEHAVIOR

Purpose: To study family interaction correlates of child deviant behavior in families in which there is, respectively, an aggressive, withdrawn, or non-deviant male or female child between ages 9 and 11; specifically, to attempt limited experimental modification of family interaction thought to be related to child deviant behavior.
Subjects: 360 families corresponding to following child characteristics: 20 male and 20 female children in each of the three trait groups described above and at each age level (9, 10, and 11).
Methods: Parents are rated on a semi-structured interview. A standard three-way interaction assessment procedure will also be given to father, mother, and child. Experimental attempts of modification will focus on interrupting sequences of blaming-counter-blaming behavior and on increasing assertive behavior in the withdrawn child.
Duration: May 1966-June 1969.
Investigator(s): Barclay Martin, Ph.D., Professor of Psychology, and E. Mavis Hetherington, Ph.D., Associate Professor of Psychology, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned; possibly a book.

21-JG-2 PARENTAL EXPECTATIONS AND THE RESULTS OF PSYCHOLOGICAL SERVICES TO CHILDREN

Purpose: To investigate congruency between what parents expect of services rendered to them and their child by clinical psychologists and services actually rendered; to assess results of services from point of view of parents' perceptions and reported concerns about the children's "symptoms."
Subjects: Parents and children in the caseload of a clinical psychologist in private practice.
Methods: Parents are asked to rank seven expectations in order of their importance to them. This will be done when they apply for service and at termination. Each parent ranks items separately. Parents are given a checklist of children's behaviors and asked to indicate those about which they are worried and the intensity of their worry. This list will be used at application, termination, and six-month follow-up.
Duration: June 1966-indefinite.
Investigator(s): Martin R. Gluck, Ph.D., Associate Professor of Psychology, University of Texas Southwestern Medical School; and Wirt M. Wolf, Ph.D., Private Practice, Dallas, Tex. 75235.
Publication: Journal publication planned.

21-JG-3 RELATIONSHIPS BETWEEN PARENTAL ATTITUDES AND BEHAVIOR

Purpose: To explore relationships between parental attitudes as measured by a questionnaire and observed behavior of parents' interaction with an adolescent son. Using the Leary system of interpersonal analysis, wherein behavior is divided into a circular continuum of eight general categories having a systematic relationship among them, we hypothesized a close, positive relationship between specific attitudes and corresponding kinds of behavior on the circular continuum, with relationships becoming increasingly discrepant as they become further removed from the relevant behavior.
Subjects: 26 mothers and 26 fathers and their adolescent sons, referred for psychiatric treatment because of severe underachievement or behavior problems.
Methods: Measures of parental attitudes were obtained from the Parental Attitude Research Instrument. Concern was with three factors: authoritarian-control, democratic, and hostile-rejection. Families were also observed in a small room through a one-way mirror while they answered a questionnaire designed to stimulate family discussion. Interactions were observed, tape recorded, and subsequently coded according to Leary's categories. Data were analyzed by comparing each attitude factor to the eight behavior categories of both mothers' and fathers' groups by means of rank difference correlations. The obtained correlations for each attitude factor for both parent groups were then ranked from highest to lowest and compared to expected ranks according to expected behavioral trends.
Findings: Two of the attitude factors for fathers--democratic and hostile-rejection--followed the predicted behavioral trend. The democratic correlation was significant at the .05 level; the hostile-rejection correlation approached significance. The democratic correlation for the mothers followed the predicted trend but was not significant; the hostile-rejection correlation for the mothers was neutral. The authoritarian-control correlations for both fathers and mothers were in the opposite direction from that predicted.
Duration: 1965-1967.
Investigator(s): Fortune V. Mannino, Ph.D., Project Director, and Exall L. Kimbro, Jr., M.D., Chief, Clinical Research and Program Evaluation Section, Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd. E., Adelphi 20783; Barbara Morgenstern, M.A., School Psychologist, Board of Education, Prince George's County, Md.; and Julia Kisielewski, M.A., Social Science Analyst, University Research Corporation, Washington, D. C.
Publication: Journal publication is planned.

21-JG-4 THE EFFECT OF THERAPIST VARIABLES ON CHILDHOOD ADJUSTMENT AS A FUNCTION OF WORK WITH PRE-INTAKE PARENT COUNSELING GROUPS

Purpose: To test the social learning theoretical proposition that effective therapists provide parents with models for facilitative human relationships, that parents then offer such enhanced growth-promoting conditions to their children, and that the children in turn learn to function more effectively on the same relationship dimensions in their human encounters; to study the potential of working with pre-intake counseling groups in order to offer an effective service to a greater number of people.
Subjects: Parents of emotionally disturbed children who have applied to a child guidance clinic for help.
Methods: Levels of accurate empathic understanding, respect, genuineness, and concrete discussion offered by several different therapists in short-term parent counseling groups are rated from tape recorded excerpts. Levels of parental functioning on these dimensions are determined from

ratings of tape recorded counseling group excerpts as well as from a relationship inventory. Changes in child functioning are assessed from before and after personality testing of the child, as well as from parental and teacher ratings.
Duration: October 1966-October 1967.
Investigator(s): David Donofrio (Ph.D. Candidate, State University of New York at Buffalo), Intern Psychologist, The Psychiatric Clinic, Inc., Central Park Plaza, Buffalo, N. Y. 14214. (Reported by Ralph Bierman, Ph.D., Director of Research, The Psychiatric Clinic, Inc.)
Publication: Publication planned.

21-JG-5 INDICATIONS AND COUNTER-INDICATIONS FOR THERAPEUTIC INTERVENTION IN THE PRE-NURSERY VIA THE MOTHER

Purpose: To establish criteria for selecting mother-child dyads favorable for therapeutic intervention via the mother for children under three.
Subjects: Two mother-child dyads (first stage) to be followed by other pairs.
Methods: Two-to-three-year-olds and their mothers are observed by participant and non-participant observers in a pre-nursery; group guidance sessions are conducted with the mothers; and assessment is made of change in presenting symptoms of child by team of investigator, pre-nursery teacher, and group therapist.
Duration: 1965-indefinite.
Investigator(s): Augusta Alpert, Ph.D., Associate Director, Child Development Center, 120 W. 57th St., New York, N. Y. 10019.
Publication: The Psychoanalytic Study of the Child, November 1967, in press.

21-JG-6 JANE WAYLAND CHILD CENTER DAY TREATMENT PROGRAM

Purpose: To conduct a program for disturbed children who have been excluded from public schools because of their behavior; to develop measurements to evaluate results; to develop cooperative teaching-therapy techniques applicable to regular educational programs; and to evaluate the effectiveness of including parents, on a mandatory basis, in the therapy program.
Subjects: Emotionally disturbed children, ages 7-1/2 to 12.
Methods: School is in session for eight hours a day, eleven months a year. Classrooms have special education teachers. Each child has a prescribed program of education and therapy evolved by the mental health staff of the Center and the teachers. The children are seen individually for psychotherapy twice a week, and parents receive individual or group therapy weekly.
Findings: Significant differences are evident between the various subgroups: (1) children in therapy and the day-treatment program and their parents in treatment, (2) children and parents in treatment, (3) children only in treatment, and (4) parents only in treatment. Also, it has been found that (1) a high proportion of emotionally disturbed children have cerebral dysfunctions. This is not seen on psychological tests, or neurological or psychiatric examinations because of the overwhelming impact of the emotional disturbance; such organicity, however, becomes apparent after the child improves in treatment, (2) the structuring of physical space can be a highly effective adjunct to milieu therapy, and (3) treating of the children without a concomitant treatment of parents may be a waste of time.
Duration: 1964-August 1967.

Investigator(s): Francis A. Enos, Ph.D., Chief Clinical Psychologist, Jane Wayland Child Center, 1937 West Jefferson, Phoenix, Ariz. 85009.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-JH-1 PSYCHOPHARMACOLOGICAL STUDIES IN CHILDREN

Purpose: To study the effects of certain compounds on behavioral symptomatology of children.
Subjects: 50 or more children, ages 5 to 16, with varied behavioral problems.
Methods: Appropriate baseline studies are done. The child then takes, in a double-blind procedure, an agent for two to three weeks. Detailed observations are made and the basic studies repeated after each trial.
Duration: 1965-1966.
Investigator(s): Irvin A. Kraft, M.D., Associate Professor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Medical Director, Texas Institute of Child Psychiatry, and Cahit Ardali, M.D., Clinical Instructor, Baylor University College of Medicine, and Project Director, Texas Institute of Child Psychiatry, Houston, Tex. 77025.

21-JH-2 MEASURE OF CHANGE IN MENTAL HEALTH STATUS OF CHILDREN

Purpose: To test the sensitivity and validity of a method for making clinical inferences from behavioral data. The behavioral and clinical instruments and the procedures for relating the two are designed to evaluate effectiveness of various types of intervention, especially through psychotherapy, with emotionally disturbed children.
Subjects: Ten latency children undergoing psychotherapy twice a week.
Methods: Cases assessed at intake and one year later. A 237-item Deviant Behavior Inventory is filled out by research team from five sources: mother, father, teacher, school observer, and home observer. Psychiatrists make clinical evaluation along Clinical Assessment Outline, on basis of configurations of behaviors. Agreement among judges is measured.
Findings: Meaningful clinical assessments of mental health status and of changes in it are practicable, reliable and, as far as can be determined, valid. Criteria of evaluation can be specified and behavioral signs observed. The process of intrapsychic change can be explored and hypotheses formulated and tested.
Duration: January 1965-February 1967.
Investigator(s): Eva Rosenfeld, Ph.D., Project Director, Jewish Board of Guardians, 120 W. 57th St., New York, N. Y. 10019. (Reported by Donald M. Feldman, Administrative Assistant, Jewish Board of Guardians.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Book to be published in 1968.

21-JH-3 THE TEXAS ANIMAL CARTOON OBSERVATION SERIES (TACOS)

Purpose: To relate an unambiguous patient-response (dichotomous preferential sorting of animal cartoons) to observed behavior and factual data concerning the child's age, sex, birth order, sibling order, adoptive status, and clinical diagnosis.

Subjects: 70 children referred to Division of Child Psychiatry, University of Texas Medical Branch; 90 children sampled from the Galveston Independent School District; 20 of the children demonstrate reading disorders in the absence of manifestations of emotional disturbance.
Methods: Pilot study aimed at initial development of cartoons, assessing their discriminatory properties, and arriving at empirically based hypotheses concerning cartoon sortings and their relationships to reported behavior and factual information.
Duration: January 1966-1968.
Investigator(s): Willy A. Kouw, Ph.D., Assistant Professor, Department of Neurology and Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted to Journal of the American Academy of Child Psychiatry.

21-JH-4 CARTOON SORTING BY THERAPISTS AND THEIR PATIENTS AS A NON-VERBAL INDEX OF "UNDERSTANDING"

Purpose: To explore levels of agreement on a standard behavioral variable (TACOS sortings) between child psychiatric patients and their therapists.
Subjects: Psychotherapists of varying levels of experience select patients whom they "know very well," "know somewhat," and "don't know."
Methods: Therapists do TACOS sortings for each child patient with the instructions to sort the cartoons as they believe their patients will. Therapists' sortings are then compared with sortings actually done by the children. Amount of agreement between therapist's and child's sorting is considered to be an operational definition of "understanding" and is hypothesized to vary with therapist's experience and knowledge of the child and potentially as an index of improvement in psychotherapy.
Duration: April 1967-1968.
Investigator(s): Willy A. Kouw, Ph.D., Assistant Professor, Department of Neurology and Psychiatry, and Henry L. Burks, M.D., Associate Professor and Chief, Division of Child Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.
Publication: Articles planned in child psychiatry journals.

21-JH-5 NIACINAMIDE AND ITS EFFECTS IN MODIFYING THE COURSE OF CHILDHOOD SCHIZOPHRENIA

Purpose: To ascertain the validity of claims of the beneficial therapeutic effects of niacinamide on the course of childhood schizophrenia, and to attempt to duplicate the procedure for obtaining the "mauve factor."
Subjects: A population of at least 60 children with childhood schizophrenia, under age 12.
Methods: A double-blind study, with two groups randomly chosen, one receiving niacinamide and the other a placebo. Psychological and clinical investigations were utilized to screen the subjects and are being used with ratings to follow the progress of the children. Initial urine testing for "mauve factor" has been carried out.
Findings: All urine specimens tested have failed to reveal a "mauve factor" in our subjects.
Duration: December 1966-December 1967.

Investigator(s): W. A. Hawke, M.D., Chief, Department of Psychiatry; G. H. C. Greenbaum, M.D., Consultant in Child Psychiatry and Clinical Assistant; and M. Havelkova, M.D., Staff Psychiatrist, The Hospital for Sick Children, 555 University Ave., Toronto, Ontario, Canada.
Cooperating group(s): West End Crèche, Toronto; Ontario Mental Health Foundation.
Publication: Publication planned.

21-JH-6 A DEMONSTRATION AND RESEARCH PROJECT TO ESTABLISH PRE-PLACEMENT TREATMENT SERVICES FOR CHILDREN ACCEPTED FOR RESIDENTIAL TREATMENT, AND THEIR FAMILIES

Purpose: To demonstrate the effectiveness of pre-placement treatment services in preventing or shortening institutional care; to compare the use of placement made by the group of children and families served by the project with the use of placement made by a similar group not enrolled in the project; to determine the extent to which a program geared to working intensively with the families and community agencies can meet the therapeutic, social, and educational needs of emotionally disturbed children for whom residential treatment has been recommended; to measure validity of assessment of family strengths and weaknesses as presently made by the Admissions Committee of Children's Village.
Subjects: 12 boys accepted for residential treatment, and their families.
Duration: January 1966-January 1967.
Investigator(s): Mary F. Clancy, M.S.W., Director, Casework Services, Children's Village, Dobbs Ferry, N. Y. (Reported by NCCD. See Note, p. 73.)
Cooperating group(s): Federation of Protestant Welfare Agencies.

21-JH-7 MAGNESIUM PEMOLINE WITH EMOTIONALLY DISTURBED BOYS

Purpose: To determine the effect of magnesium pemoline on the learning abilities and energy levels of emotionally disturbed boys.
Subjects: 60 eight-year-old boys clinically diagnosed as slightly and moderately disturbed.
Methods: A double-blind study is conducted in which children are evaluated clinically, measured with activity room test to establish activity levels before and after administration of the drug, and given pre- and post-tests, including learning, OMR, FSP, etc.
Duration: March 1967-June 1968.
Investigator(s): Irvin A. Kraft, M.D., Associate Professor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Medical Director, Texas Institute of Child Psychiatry; and Cahit Ardali, M.D., Clinical Instructor of Psychiatry and Pediatrics, Baylor University College of Medicine, and Project Director, Texas Institute of Child Psychiatry, Houston, Tex. 77025.
Cooperating group(s): Abbott Drug Company.
Publication: Publication planned upon completion.

21-JI-1 THERAPEUTIC EDUCATIONAL PROGRAM FOR CHILDREN

Purpose: To study effects of specially designed study programs in a therapeutic orientation on emotionally disturbed children.
Subjects: Children in the New Hampshire Hospital children's units.

Methods: Individualized special education methods; situational therapy, and individual or group therapy.
Duration: September 1966-June 1969.
Investigator(s): G. Donald Niswander, M.D., Director of Research and Education, and Cornelius J. Coco, M.A., Senior Psychologist, Therapeutic Education Program, New Hampshire Hospital, 105 Pleasant St., Concord, N. H. 03301.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Yearly and final reports to National Institute of Mental Health.

21-JI-2 PROGRAMMED TRAINING AND PLACEMENT FOR NON-PSYCHOTIC BEHAVIORALLY DISTURBED ADOLESCENTS

Purpose: To utilize methods of programmed interaction re-training as basis for new type of personal adjustment training.
Subjects: Male adolescent primary behavior disorder patients, age 15 and over.
Methods: Supervisory behavior patterns in a sheltered workshop are programmed to expose each boy to the kinds of stress he may encounter in industrial employment, parallel to and integrated with those he learns to manage in individualized training sessions. Vocational evaluation and personal adjustment plan based on skills, interests, measures of behavioral vulnerabilities, and strengths is developed for each boy. Boys will be placed in industrial jobs as first step in comprehensive follow-up program.
Duration: Not reported.
Investigator(s): Eliot D. Chapple, Ph.D.; Jeffrey Beeson, M.D.; and Martha Fontana Vrolyk, Research Foundation for Mental Hygiene, Rockland State Hospital, Orangeburg, N. Y. 10962.
Cooperating group(s): Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.

21-JI-3 STUDY OF THE PROGRAM OF THE GEORGE JUNIOR REPUBLIC

Purpose: To explore the feasibility and design of studies to describe and evaluate the socio-cultural features of the George Junior Republic's residential treatment community as related to the growth, development, adjustment, and behavioral changes in troubled adolescents. Special attention will be devoted to such unique features as the self-government of adolescents and the economic system.
Subjects: Entire population of the community, i.e., adult staff members and adolescents, perhaps with selected sub-samples for intensive attention.
Methods: Initially, field observation.
Duration: April 1966-March 1968.
Investigator(s): Robert E. Pittenger, M.D., Director of Research and of Psychiatric Services, and William E. Knox, Ph.D., Research Project Supervisor, The George Junior Republic, Freeville, N. Y. 13068.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

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21-JI-4 CLINICAL INVESTIGATION OF CROSSED CONTROL IN A RESIDENTIAL TREATMENT CENTER

Purpose: To test whether work done by Berner and Berner on remedial treatment of crossed control in private practice of ophthalmology would be applicable to students in a residential school for special students.
Subjects: 900 residents of Devereux Schools.
Methods: Children are screened for visual and/or visual-motor problems, and those with suspected poor eye use on the side of the handedness or any mixed use of hands and feet are given an ophthalmological examination with full study of binocular vision function. Recommendations may include prescription of glasses, orthoptic training, or treatment of crossed control, or a combination of the above. Specific treatment of crossed control involves use of glasses if indicated, occlusion of one eye if indicated, and development of unilateral motor use on the side of the established or being established controlling eye. Children are followed up and directed toward establishing total unilaterality in control of binocular vision, primary hand use, and foot use.
Findings: No observation has been made to contradict earlier studies of crossed control by Berner and Berner. Treatment of crossed control leads to improved academic achievement and general progress and adjustment of Devereux School residents.
Duration: June 1960-June 1970.
Investigator(s): George E. Berner, M.D., Consultant in Ophthalmology; Dorothy E. Berner, B.S., Consulting Orthoptic Technician; Marguerite B. Horn, M.A., Language Development Psychologist; and Walter M. Uhler, M.D., Head of Medical Staff, The Devereux Schools, Devon, Pa. 19333.
Cooperating group(s): The Devereux Foundation.
Publication: Southwestern Medicine 44:2, 1963; Devereux Schools Monograph planned for Spring 1967.

21-JI-5 DEVELOPMENT OF YOUTH SERVICE

Purpose: To develop and evaluate a youth service which will be an all-purpose psychiatric facility for treatment, training, and research.
Subjects: Eventually, 25 boys and 20 girls, ages 15 to 19. First group will consist of six boys to age 17, five of whom have been diagnosed as behavior disorders, the sixth a behavior disorder combined with psychomotor epilepsy.
Methods: Complete facilities, including individual and group therapy and casework with patients and their families will be intensified and expanded, as will academic and vocational education. There will be full use of ancillary therapies, as well as standard treatment procedures. An evaluation by clinical and psychological methods will be made of the milieu, group, individual and family, occupational, recreational, and educational therapies.
Duration: June 1966-May 1970.
Investigator(s): Newton Bigelow, M.D., Director, Marcy State Hospital, Marcy, N. Y. 13403.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-JI-6 EVALUATION OF AN ADOLESCENT UNIT IN A STATE HOSPITAL FOR THE MENTALLY ILL

Purpose: To evaluate the outcome of a newly established program for providing daytime services for patients in an adolescent unit.
Subjects: Boys and girls, ages 16 to 18, who were admitted to the adolescent program and are expected to be hospitalized for at least six months, and patients of the same age group on the regular adult wards and not in the special unit for adolescents.
Methods: Attendance at staff meetings, analyses of staff minutes, interviews with staff and patients, administration of special tests and attitude scales, analysis of case records; study of the patient careers of adolescents in the program and comparison with adolescents of the same age group in the regular adult wards; and observation of role relations of staff members within the adolescent unit and with staff members of other units.
Duration: January 1967-March 1968.
Investigator(s): Irving Babow, Ph.D., Research Social Scientist, Napa State Hospital, Imola, Calif. 94558.
Publication: An evaluation report is planned and will be available from the principal investigator; journal article also planned.

21-JI-7 TREATMENT OF ADOLESCENT PRIMARY BEHAVIOR DISORDERS

Purpose: To improve the effectiveness of the juvenile unit of Rockland State Hospital through a coordinated program involving the incorporation of a number of programs into an overall organizational design and a continuous individual treatment plan and intensive follow-up from patient's admission to the hospital through his final job and family placement in the community after discharge.
Subjects: Primarily, those patients in the male admission and older adolescent buildings; ultimately, all 700 patients in the juvenile unit, ages 5 to 16.
Methods: Development of coordinated data on each child; interviews with each child to determine his interactional patterns so that he may condition himself to manage his own reactions to stressful situations; placement of children in wards, occupants of which are homogeneous with respect to age, maturation level, behavior pattern, and intellectual potential; utilization of modern educational methods (I.T.A., learning machines, etc.) with total educational effort organized around the ward as a unit; establishment of sheltered workshops in a vocational rehabilitation setting; correlated evaluation and treatment by social worker, vocational rehabilitation counselor, teachers, and group workers; follow-up of case for two years after discharge from hospital.
Duration: 1966-1971.
Investigator(s): Alfred M. Stanley, Senior Director, and Eliot D. Chapple, Ph.D., Principal Research Scientist, Rockland State Hospital, Orangeburg, N. Y. 10962.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-JI-8 THE "ARMY" INCIDENT: THE PSYCHOLOGY OF UNIFORMS AND THEIR ABOLITION ON AN ADOLESCENT WARD

Purpose: To elucidate the social and clinical implications and the specific therapeutic values of the wearing of uniforms by nurses and aides on an inpatient service for 8- to 18-year-olds and to clarify and redeem the clinical significance of the institution and the authority such uniforms embody.

Subjects: Patients and staff of a Rapid-Turnover Latency-and-Adolescent Ward in a metropolitan receiving hospital.
Methods: Participant-observation of group behavior during a critical period before and after abolition of staff uniforms, examining particularly the determinants of the decision to eliminate them and immediate impact of their disappearance.
Findings: The innovation in dress lead to an insurrection in which patients became mobilized as a uniformed "army." Uniforms emblematically clarify institutional social structure and the roles of individuals in it in a manner reassuring to both staff and patients, most especially adolescent patients. Their presence may stabilize group dynamics by acting more to distract attention from and rationalize potentially disruptive conflicts than to intensify them. They may mediate between a hospital and its patients by embodying the hospital's often maligned but potentially most therapeutic qualities--its institutional nature and authority itself. By attracting or encouraging the transference of positive and/or negative feelings toward the institution it represents, a uniform may sustain, re-direct, or divide these feelings in a fashion that offers great benefit to some patients.
Duration: October 1965-completed.
Investigator(s): Donald J. Marcuse, M.D., Staff Child Psychiatrist, Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd. E., Adelphi, Md. 20783.
Cooperating group(s): Adolescent Psychiatric Inpatient Service Staff of Jacobi Hospital, Bronx Municipal Hospital Center, and Albert Einstein College of Medicine, Bronx, N. Y.
Publication: Submitted to professional journal.

Socially Deviant

Note: Some of the following delinquency studies, as well as a few in other categories, were taken from the section "Current Projects," in Crime and Delinquency Abstracts, Vol. 4, Nos. 1 and 2, 1966 (formerly entitled International Bibliography on Crime and Delinquency). This publication is prepared by the National Clearinghouse for Mental Health Information of the National Institute of Mental Health (Bethesda, Md. 20014) from material provided by the National Council on Crime and Delinquency (44 E. 23rd St., New York, N. Y. 10010). The studies are noted: (Reported by NCCD.)

21-KA-1 PARTURITION IN A PSYCHIATRIC HOSPITAL

Purpose: To learn what social plans (relative, foster home, adoptive) were made for care of infants born to pregnant patients in a State Hospital. Certain descriptive data were obtained about the mothers and their babies to determine which mothers kept or relinquished their children.
Subjects: 133 mothers and 144 infants.
Methods: A retrospective study of clinician record of patients giving birth during the period from 1950 to 1962.
Findings: Most women who gave birth in this State Hospital had been admitted during their pregnancy. The remainder became pregnant while on visits and leaves. At parturition the mothers tended to be unmarried white schizophrenic women between 30 and 40 years old. The mothers' families

cared for 37.7 percent of the babies; social agencies cared for 26.8 percent in foster homes, and 35.5 percent were relinquished for adoption. Between 1950 and 1962 there were 144 babies born, including six fetal or neonatal deaths. Among the 138 live births there were four sets of twins and a sex division of 73 girls and 65 boys. A statistically significant level of association was found between the mother's decision to keep this child and having given birth to a prior child.
Duration: 1964-1965.
Investigator(s): Donald T. Lee, M.S.W., Chief, Social Service Department, Camarillo State Hospital, State Department of Mental Hygiene, Box A, Camarillo, Calif. 93010.
Publication: Publication planned.

21-KA-2 HARTFORD OUT-OF-WEDLOCK (HOW) STUDY

Purpose: To determine the magnitude and ramifications of the problem of out-of-wedlock births of mothers delivered in Hartford hospitals; to develop guides for future programming for mothers pregnant out of wedlock and for early case-finding for all prenatal patients.
Subjects: Approximately 3,000 mothers, pregnant out of wedlock, and their infants delivered in Hartford hospitals from January 1, 1961 through December 31, 1965.
Methods: Comparison and evaluation of data for mothers pregnant out of wedlock, tabulated annually from birth and death certificates; dissemination of these data among physicians, nurses, and social workers serving unwed mothers and their infants; collection of medical, nursing, and social data on unwed mothers and their infants; future plan for program for mothers pregnant out of wedlock.
Duration: March 1962-June 1967.
Investigator(s): Jessie E. Parkinson, M.D., Director, and Alberta Martucci, Research Analyst, Bureau of Maternal and Child Health, Hartford Health Department, 56 Coventry St., Hartford, Conn.
Cooperating group(s): McCook Memorial Hospital; Mount Sinai Hospital; Saint Francis Hospital; Hartford Hospital; Visiting Nurse Association; Catholic Family Services; Jewish Social Service; Children's Services of Connecticut; Hartford Welfare Department; Connecticut State Department of Health; Connecticut State Welfare Department, Hartford, Conn.; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Progress reports distributed in April 1964 and May 1965. Final report to be prepared in 1967 for publication.

21-KA-3 CONNECTICUT STUDY OF ILLEGITIMACY, 1966

Purpose: To improve social, medical, and educational programs and facilities for illegitimately pregnant women. To answer such questions as: (1) What is happening in Connecticut relative to illegitimate pregnancies; (2) What is the present extent and trend; (3) Who and where are the unwed mothers, in which socio-economic areas; (4) Who are the alleged fathers; (5) What social agencies provide what service to which unwed mother; (6) What is the mobility and source of maintenance of the unwed mother; (7) What is the extent of medical care provided; (8) How does the outcome of out-of-wedlock pregnancies compare with that of legal pregnancies in terms of birthweight distribution and fetal, neonatal, and infant mortality; (9) What happens to the babies born to these mothers. The ultimate goal is prevention.

Subjects: All illegitimately pregnant women known to any social agency, nursing agency, juvenile court, corrective institution, school, hospital, or mental institution in Connecticut. (It is estimated that 70 to 90 percent of Connecticut's unwed mothers have had at least one contact with one or more of these agencies in regard to their pregnancies. We can only assume that those mothers who leave the State and have no contact with a Connecticut agency are offset by mothers entering Connecticut from other states who use our agency services.)
Methods: Printed questionnaires have been made available to all the above agencies throughout Connecticut to be filled out for each known illegitimately pregnant woman, regardless of whether or not the agency is able to follow each woman through to a pre-designated three-month post-partum period. Women who make just one agency contact and then disappear are logged as known cases to be watched for elsewhere at delivery time. When a woman is referred to a different agency, the partially filled out questionnaire is also sent to the referral agency for completion. When the infants born of these pregnancies are three months old, a record of their status is filled out, and the completed questionnaire is then mailed to the State Department of Health for editing, coding, and data processing. From this, an analysis with informative tables will be printed.
Duration: January-December 1966.
Investigator(s): Jo Ann Gustafson, Research Analyst, Maternal and Child Health Section, Connecticut State Department of Health, 79 Elm St., Hartford, Conn. 06115. (Reported by Harold S. Barrett, M.D., Deputy Commissioner, Connecticut State Department of Health.)
Cooperating group(s): Connecticut Child Welfare Association; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned.

21-KA-4 EVALUATION OF EFFECTIVENESS OF A COMPREHENSIVE CARE PROGRAM FOR UNWED SCHOOL AGE GIRLS IN CHICAGO

Purpose: To assess the outcome of the multi-faceted program and the efficacy of varied interventions; to find implications which will help in the development of more effective services and more pertinent programs under government and voluntary auspices.
Subjects: 1,200 to 1,500 unwed pregnant adolescent girls in the Chicago area, 108 of whom received comprehensive care.
Methods: Model includes two groups; one group receives all available services while the other receives little or no care until delivery. Evaluation of the efficacy of the medical, educational, social, and psychological services provided. The data collection instrument developed earlier will be used with personality inventories and rating scales to measure intervention and change.
Findings: Results of this program have encouraged the development of a larger program providing comprehensive care. 61 percent of the clients came from one parent families, 40 percent of the clients and 61 percent of their parents were born in the South, and 32 percent of the clients were conceived out of wedlock.
Duration: October 1966-continuing.
Investigator(s): Jean E. Bedger, M.A., Diploma in Clinical Psychology, Research Director, Florence Crittenton Association of America, Inc., 608 S. Dearborn St., Chicago, Ill. 60605.
Cooperating group(s): Chicago Board of Health; Chicago Board of Education; Illinois State Department of Public Health; Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Findings of the evaluation to be published when available.

21-KB-1 OUTPATIENT GROUP PSYCHOTHERAPY WITH JUVENILE SEX OFFENDERS: A PSYCHOANALYTIC MODEL

Purpose: Based on Freud's Three Essays on Sexuality, this research is to demonstrate a psychoanalytic model of treatment for the so-called "sociopathic" chronic sex offender and the reconstruction of his personality.
Subjects: A homogeneous group of sex offenders only (exhibitionists, child molesters, and rapists), and a heterogeneous group of sex offenders and other offenders.
Methods: Group psychotherapy.
Duration: 1966-December 1967.
Investigator(s): Hans A. Illing, Ph.D., The Hacker Clinic, 3621 Century Blvd., Lynwood, Calif. 90262.
Publication: To be presented during the 25th Annual Convention of the American Group Psychotherapy Association in Chicago, Illinois, January 1968.

21-KC-1 JUVENILE ARRESTS IN CINCINNATI, 1963-1964

Purpose: To determine whether (1) there are any identifiable characteristics which distinguish between recidivists and non-recidivists, (2) various types of services rendered by different agencies have a different effect on youngsters' adjustment, (3) there is a lag or lack of services for youngsters who come in contact with the Juvenile Police, and (4) the proper referral or disposition of juvenile arrests is made.
Subjects: 15,000 boys and girls, representing 25,000 arrests.
Methods: Family background is traced, and subjects are followed for several years.
Duration: June 1965-1968.
Investigator(s): Murray Weisman, Associate Director, The Citizens' Committee on Youth, 909 Plum St., Cincinnati, Ohio. (Reported by NCCD.)

21-KC-2 A STUDY OF THE SOCIAL MILIEU OF THE GREATER CHARLESTON AREA

Purpose: To study the social milieu in which the children and youth of the greater Charleston area live and grow; to develop hypotheses regarding the patterns of social forces and structures which lead to social pathology in this community; to make proposals for suitable community intervention.
Methods: All existent studies of the community, particularly those relating to services to children and youth, will be examined. Major social institutions and agencies in the area, including schools, courts, informal children's and youth groups, police, and private welfare agencies will also be studied to correlate inadequacies and gaps in community services with social pathology, including juvenile delinquency, youth crime, and school dropouts. Recreational and job opportunities for youth and adults also will be studied and related to youth attitudes and behaviors. Ecological analysis, relating the findings about the community and about the social pathology of its children and youth, will follow.
Duration: Not reported.
Investigator(s): Gordon S. Jaeck, Charleston Youth Community, Inc., No. 8 Terminal Building, Eighth Floor, Charleston, W. Va. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KE-1 SOME BEHAVIORAL CORRELATES OF CEREBRAL DYSRHYTHMIA IN DELINQUENTS

Purpose: To explore behavioral differences between matched groups of delinquents and normals with average or above average scores on I.Q. tests, and to explore further differences between two matched groups of delinquents, one with definite signs of cerebral dysrhythmia on the EEG, and another without such signs.
Subjects: 20 normal subjects, and 43 delinquent subjects in two groups which were differentiated in terms of presence or absence of definitive signs of cerebral dysrhythmia on the EEG recordings. Subjects were male, ages 13 to 18, I.Q. 90 to 130, and racial origin 80 percent white.
Methods: Behavioral aspects investigated by this study included risk-taking behavior using games from game theory, neuroticism, extraversion, personal constructs, and psychomotor inhibition. All experimental subjects, certified to be clearly dysrhythmic or clearly non-dysrhythmic by two neurologists, were required to take an EEG. Control and experimental subjects were then given paper-and-pencil tasks devised to measure proclivity for risk-taking, the Maudsley Personality Inventory for measures of extraversion and neuroticism, Kelly's Personal Constructs Test, and Colvin's Spiral Test of Psychomotor Inhibition.
Findings: 1. There were significant differences between normal and delinquent groups in terms of playing a conservative, but ultimately rewarding, minimax strategy. There were no differences, however, between the two groups of delinquents. 2. Significant differences were found between dysrhythmic and non-dysrhythmic delinquent groups on the Spiral Test of Psychomotor Inhibition. The dysrhythmic group was consistently inferior in inhibiting the motor response.
Duration: Completed.
Investigator(s): James A. Beshai, Ph.D., Assistant Professor of Psychology, Duquesne University, Pittsburgh, Pa. 15219.
Cooperating group(s): University of Kentucky; Veterans Administration Hospital, Lexington, Kentucky.
Publication: A copy of Dr. Beshai's Ph.D. dissertation is available upon request.

21-KE-2 PERSONALITY FACTORS WHICH INFLUENCE CLOTHING FABRIC SELECTIONS BY DELINQUENT GIRLS

Purpose: To determine relationship between personal characteristics and clothing fabric preferences of delinquent girls.
Subjects: Delinquent girls at Utah State Industrial School and non-delinquent girls at a local high school.
Methods: Compton Fabric Preference Test was administered to delinquent and non-delinquent girls to yield scores for (1) tints, shades, and bright colors, (2) strong vs. weak figure-ground contrasts, (3) warm vs. cool colors, (4) large vs. small designs, and (5) rough vs. smooth textures. Fabric preferences will be analyzed in relation to physical measurements, perceptual types (reducers, augmenters, moderates) as determined by subjects' methods of processing the sensory environment in terms of size perception, masculinity-femininity aspect of personality as measured by the Franck Drawing Completion Test, and body image (barrier concept and penetration of boundary aspects of personality) as measured by Rorschach content analysis.
Duration: July 1965-December 1966.
Investigator(s): Norma H. Compton, Ph.D., Head, Clothing and Textiles Department, College of Family Life, Utah State University, Logan, Utah 84321.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-KK-3 MATURATIONAL REFORM AND RURAL DELINQUENCY

Purpose: To investigate the extent to which delinquency can be viewed as a product of the stress which attaches to adolescent status in our society, and the specific character of the maturational reform that occurs as the deviant adolescent moves into adulthood; specifically, to examine, in a non-metropolitan environment, the nature of the shifting commitments that occur in the areas of education, work, family, community, and peer group involvement as a part of the process of maturational reform. Further, to examine geographic mobility of problem and non-problem youth in order to assess the extent to which rural delinquency leads to adult maladjustment among those youth who migrate to the city.
Subjects: A 25 percent simple random sample (N=310) of the approximately 1,250 sophomore boys enrolled in the schools of Marion County in December 1964; a 100 percent sample of those youth who dropped out of school any time subsequent to December 1964 (N=125); and a 100 percent sample of those youth whose names appeared in the juvenile court records of the county (N=260). The random sample itself provided at least 100 youth with one or more of the following characteristics: low educational achievement, rural residence, low socio-economic status, no college plans.
Methods: Cohorts were initiated during their sophomore year of high school, at which time they completed a detailed questionnaire. They were first interviewed approximately two years later during their senior year. These procedures provided two waves of data prior to age 18 and high school graduation. Together, with subsequent yearly interviews for four additional years, they permit the tracing of changes that take place from a point in mid-adolescence (age 15) to early adulthood (age 21). Twenty-five percent of the items in the interview schedule were identical to those appearing in the earlier questionnaire and will provide direct comparisons in each of the five areas of the "competing commitments" hypothesis. In addition, at least one question from each of the five major areas was "pre-keyed" with the respondent's previous answer in an effort to detect change. Instances of major change were probed in some depth concerning how and why the change had come about. Supportive procedures include collection of year-by-year records of academic performance and year-by-year court and police records so that patterns of maladjustment (including time origins and persistence) can be established for different cohorts.
Duration: June 1966-May 1971.
Investigator(s): Kenneth Polk, Ph.D., Principal Investigator, Marion County Youth Study, 1859 E. 15th Ave., and Associate Professor, Department of Sociology, University of Oregon, Eugene, Ore. 97403. (Reported by F. Lynn Richmond, Study Director, Marion County Youth Study.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: It is anticipated that results will be published in a variety of articles and monographs. In addition, papers reporting research findings will be presented at regional and national professional meetings as well as state and regional conferences attended by professionals and sub-professionals working directly with rural youth.

21-KK-4 DELAY OF GRATIFICATION, PORTEUS MAZE TEST PERFORMANCE, AND BEHAVIORAL ADJUSTMENT IN A DELINQUENT GROUP

Purpose: To explore relationships between a behavioral and verbal measure of delay of gratification, Porteus Maze Test measures of planning ability and foresight and impulse control, and ratings of adjustment in a school for delinquent adolescent males.
Subjects: First 50 new admissions to the New Mexico Boys School who said they smoked; mean age 16.0.

Methods: Porteus Maze Test and an essay measure of delay of gratification were administered. Subjects were also given a coupon good for one cigarette immediately or a pack of cigarettes if they waited nine days. Subjects were rated on adjustment by school staff.
Findings: Both measures of delay significantly related to Porteus measures and adjustment ratings. Delay of gratification related, in part, to age and ethnic group membership but not to I.Q.
Duration: 1964-1966.
Investigator(s): Alan H. Roberts, Ph.D., Associate Professor of Physical Medicine and Psychology, University of Minnesota, Minneapolis, Minn. 55455; and Robert V. Erikson, M.A., Student, University of North Dakota, Grand Forks, N. D. 58202.
Publication: Publication in psychology journal, 1968.

21-KE-5 DELINQUENT BEHAVIOR OF CHILDREN BELOW THE AGE OF CRIMINAL RESPONSIBILITY

Purpose: To learn basic social characteristics of children who commit offenses while under age nine, the age of criminal responsibility in Israel.
Subjects: All children who committed an offense in Israel in 1965 while under age nine.
Methods: Police files are surveyed. Data are gathered on basic social characteristics of these children and on the kind of offenses they commit. A sample of this surveyed group will be subjected to more intensive study. Psychological and sociological tests will be given, and a typology of delinquent children and of criminogenic conditions and situations will be established. A follow-up study will be done at two-year intervals.
Duration: March 1966-continuing.
Investigator(s): Menachem Amir, Ph.D., Institute of Criminology, The Hebrew University, Jerusalem, Israel. (Reported by NCCD.)
Cooperating group(s): Henrietta Szold Research Institute for Children and Youth, Jerusalem; Israel Ministry of Social Welfare.

21-KF-1 AN EXAMINATION OF PHYSICAL CHARACTERISTICS, INTERPERSONAL RELATIONSHIPS, AND PERSONALITY TRAITS OF ADOLESCENTS CONVICTED OF MULTIPLE CAR THEFTS

Purpose: To test hypothesis that adolescents convicted of multiple car thefts would display certain emasculated needs which would gain expression in the symbolism of the power, status, and mobility of the automobile, and that there would be certain physical characteristics, personality factors, and social factors which would explain the etiology of the multiple car thefts.
Subjects: Youths, ages 16 to 21, under supervision of the New York State Division of Parole between September 1, 1965 and March 31, 1966, 15 of whom had committed two or more car thefts, and 15 of whom had never committed a car theft.
Methods: Records were analyzed according to a wide range of criteria which evaluated the social history, family structure, and self-image of the subjects.
Findings: Although there were no distinguishable physical characteristics between the two groups, the multiple car theft offenders were notably submissive to authority, had underachieved in school, and had admittedly felt negatively of their own self-worth and competency. The failure to establish a causal relationship between the experimental group and certain environmental influences, namely structure of family and disciplinary practices of both parents, was attributed to the smallness of the sample studied.

Duration: Not reported-June 1966.
Investigator(s): Chester G. Fritz and Seymour L. Storch, School of Social Work, Syracuse University, Syracuse; and John M. Stanton, Ph.D., Director of Research, State Division of Parole, Box 1679, Albany, N. Y. (Reported by NCCD.)

21-KH-1 PSYCHOSOCIAL NETWORKS OF YOUNG DANGEROUS DRUG USERS

Purpose: To study the psychosocial network of the adolescent dangerous drug user and his immediate family living in the home.
Subjects: Ten networks are to be studied during the course of the project. Sampling of race, socio-economic, and ethnic groups.
Methods: Weekly family therapy sessions and large group psychotherapy meetings of kinship, friendship, and peer networks aimed at producing change in the social nexus around the young, dangerous drug user's family. Field work, intensive case study methods of families and networks.
Duration: September 1966-June 1969.
Investigator(s): Ross V. Speck, M.D., Clinical Associate Professor and Head, Section of Social and Community Psychiatry, Department of Psychiatry, Hahnemann Medical College, 249 N. Broad St., Philadelphia, Pa. 19107.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned; also reports to National Institute of Mental Health.

21-KH-2 DRUG HABITS OF ADOLESCENTS

Purpose: To demonstrate types and frequency of ingestion of drugs in the adolescent age group, the responsible factors, i.e., socio-economic, environmental, etc., and the role of television in initiating drug dependency.
Subjects: Adolescent girls and boys.
Methods: Survey by questionnaire, actual spot check of girls' pocketbooks, and home visits.
Duration: July 1967-July 1969.
Investigator(s): Jay M. Arena, M.D., Professor of Pediatrics and Director, Poison Control Center, Duke University, Durham, N. C. 27706.

21-KH-3 SURVEY OF THE INFLUENCE OF ALCOHOLIC BEVERAGES ON DELINQUENT YOUTH

Purpose: To study the influence of alcoholic beverages on the behavior of delinquent youth.
Subjects: 355 cases involving juvenile delinquents, excluding cases of dependency, neglect, and traffic violations. 96 of these involved drinking at the time of the violation.
Methods: A report was submitted on each case by the juvenile court judge in four Ohio counties. Data were broken down by age, sex, and race.
Findings: Over 68 percent of the delinquency violations in which drinking was detected were committed by 16- and 17-year-olds; over 82 percent of the incidents involved males; over 94 percent involved members of the white race; most girls who were drinking at the time of the violation for which they were apprehended were drinking in someone's

home or car; most of the boys' drinking was of a more clandestine nature; 25 percent of the offenses committed while drinking were major offenses; and drinking was involved in 27 percent of the total number of cases reported.
Duration: Not reported.
Investigator(s): Daniel W. Johnson, Chairman, Ohio Youth Commission, 2280 W. Broad St., Columbus, Ohio 43223. (Reported by NCCD.)
Cooperating group(s): Data Processing Section, Department of Liquor Control; Ohio Parent-Teacher Association; Governor's Action Committee on Teen-Age Drinking, Ohio.

21-KJ-1 CASE STUDIES OF LARGE FAMILIES

Purpose: To provide a sample of large non-problem families as a contrast to so-called problem families, which are typically large in size.
Subjects: Large families in which there were at least five children of school age. In half the families children were coping satisfactorily, and in others they were coping unsatisfactorily and having many problems, one of which was delinquency.
Methods: Social work students visit one problem and one non-problem family each week and become participant observers. Comparisons are made in terms of housing, father's occupation, regularity and earning capacity, mother's capacity as a housewife and her ability to control and provide affection for the family. Results are analyzed in terms of marked differences in parental personalities and attitudes, as well as in terms of certain differences in material conditions.
Duration: 1953-1967.
Investigator(s): Pauline Shapiro, Social Study Department, University of Birmingham, Birmingham 15, England. (Reported by NCCD.)

21-KJ-2 UNEMPLOYMENT AND JUVENILE DELINQUENCY

Purpose: To determine the relationship, if any, between unemployment and juvenile delinquency, particularly in the northeast of England, as an aftermath of the recession of 1961-1963.
Subjects: Male offenders, ages 14 to 17; males who were age 15 in 1962.
Methods: The group of young men who left school in 1962, when there was a surplus among the juvenile labor force, are being studied. A descriptive approach will be used to learn the coincidence of unemployment with delinquency and the possible consequences of the labor surplus on careers, particularly the incidence of delinquency.
Duration: April 1964-April 1967.
Investigator(s): M. Beeson, Senior Research Fellow in Criminology, University of Durham, 23, Old Elvet, Durham, England. (Reported by NCCD.)
Cooperating group(s): Great Britain Home Office.

21-KK-1 A STRUCTURAL APPROACH TO GANG INTERVENTION: THE LINCOLN HEIGHTS PROJECT

Purpose: To decrease gang-related delinquency through reduction of gang cohesiveness.
Subjects: Over 125 male and female members of the "Clover" gangs in East Los Angeles.

Methods: A conceptual model for gang intervention, based upon a previous project in Los Angeles, is utilized. This consists of detached workers, resource activation in the community, field observation of cohesiveness, and analysis of offense rates and patterns.
Duration: May 1966-April 1968.
Investigator(s): Malcolm W. Klein, Ph.D., Project Director, Youth Studies Center, University of Southern California, University Park, Los Angeles, Calif. 90007.
Cooperating group(s): Los Angeles County Commission on Human Relations; Ford Foundation; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Journal articles planned; also six-month progress reports.

21-KK-2 YOUTH LEADERSHIP TRAINING PROJECT

Purpose: To re-socialize delinquents so that they prepare themselves for new careers in youth development and delinquency prevention work; to assess effectiveness of former delinquents as streetworkers; and to measure influence trainees can exert on peers by channeling energies from delinquent to constructive activities.
Subjects: 18 former delinquents.
Methods: Streetworker trainees are selected from high school dropouts with substantial arrest records to undergo a training program of counseling and classroom work. They are eventually placed in social agencies in high-delinquency areas as non-professional trainee aids, where they help to organize neighborhood youth councils through which gang members assist with problems that confront community organizations serving youth in slum areas. These include schools, public playgrounds, employment agencies, the police, State Welfare Department, and Department of Juvenile Probation. Trainees meet directly with agency officials to discuss methods of dealing with mutual problems.
Findings: Some change toward desired objectives has occurred.
Duration: February 1966-January 1968.
Investigator(s): Mario D'Angeli, Ph.D., Professor and Chairman, Department of Social Welfare, San Francisco State College, San Francisco, Calif.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned for early 1968.

21-KK-3 SOUTHERN ARIZONA PRE-DELINQUENCY PROJECT

Purpose: To demonstrate a program for early intervention in identified pre-delinquent, pre-dropout cases; to develop a program of consultation which will be appropriate to a sparsely-populated, multi-ethnic group area, where direct professional contact with behavior-problem individuals is unfeasible.
Subjects: Children identified as pre-delinquent, pre-dropout cases.
Methods: Careful assessment of the child, his family, and other significant individuals in his natural environment is utilized. All therapeutic intervention is mediated by these naturally-related individuals. The intervention program is created to take advantage of child's reinforcement hierarchy. Mediators are chosen according to their ability to administer the selected reinforcements contingent on successive approximations to the desired behavior by the child. Non-professional case aides will be trained to consult "mediators."
Duration: Not reported.

Investigator(s): Gaylord Thorne, Ph.D., and Roland Tharp, Ph.D., Director, Psychology Department, Southern Arizona Mental Health Center, 1930 E. Sixth St.; Ralph Wetzel, Ph.D., Associate Professor, Psychology Department, University of Arizona, Tucson, Ariz.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KK-4 TOMPKINS COUNTY YOUTH COURT, NEW YORK

Purpose: To conduct an experimental project in citizenship training; to supplement existing facilities for the control and prevention of juvenile delinquency in Tompkins County.
Subjects: Teenagers in Tompkins County.
Methods: Volunteer lawyers instruct adolescents in court procedure, the meaning of law, and qualifications to practice in a court; duly qualified teenagers function as judges and jury in the operation of the court process and attend workshops with their parents. Offenders, ages 12 to 18, who have committed minor offenses and are not known to have psychological or social problems are judged by a court of their peers, and punishment (a certain number of hours of work) is substituted for "treatment" in the sentencing. Workshops for parents are also held.
Duration: 1961-1967.
Investigator(s): Malcolm J. Freeborn, Chairman, Administrative Board, Tompkins County Youth Board, 121 East Court St., Ithaca, N. Y. (Reported by NCCD.)
Cooperating group(s): Ithaca Youth Bureau.

21-KK-5 PREVENTION OF TEENAGE GANG FIGHTING

Purpose: To develop and improve methods for the prevention of recurrent teenage gang fighting; to attempt to re-direct these energies into constructive channels.
Subjects: Teenagers in Mexican-American slums of South El Paso, Texas, where fighting gangs emerge every 10 years.
Methods: Educational and vocational training.
Duration: Not reported.
Investigator(s): Salvador Ramirez, El Paso Boys' Club, P. O. Box 10097, El Paso, Tex. (Reported by NCCD.)
Cooperating group(s): Our Lady's Youth Center, El Paso; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KK-6 EVALUATING THE IMPACT OF VOLUNTEER WORKERS IN THE PREVENTION, CONTROL, AND TREATMENT OF JUVENILE DELINQUENCY

Purpose: To demonstrate and evaluate the potential and effectiveness of the use of volunteer personnel in action programs designed for the prevention, control, and treatment of juvenile delinquency.
Methods: Project evaluates such areas as volunteer recruitment, participation in group discussion programs and tale-playback discussion sessions held between adolescents and adults, parent groups, police, teachers, and other significant forces within the lives of adolescents. There is an

evaluation of the net effect of volunteer participation in accomplishing program goals as compared with the amount of professional staff time required to support volunteer activities. Project also evaluates use of upperclass college youth as assistant probation officers and the effect which such a program has on the probationers within the program as well as the effect on the college youth in orienting them toward a career in the corrections field. The maximum number of channels for effective volunteer contribution to a juvenile court effort will be developed and evaluated.
Duration: February 1966-July 1967.
Investigator(s): Ivan H. Scheier, Ph.D., Boulder District Court, Boulder, Colo. 80301. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KK-7 SOUTH BROOKLYN YOUTH LEADERSHIP PROJECT

Purpose: To decrease juvenile delinquency through the reduction of intergroup conflict, thereby improving intergroup relations; to build on already established intergroup leadership and extend its influence to other peer leaders in the community.
Methods: Youth leaders will be encouraged to assert their influence on the more critical age group of 6- to 12-year-olds, by providing recreational and club situations for the older youth of the project to indicate that it is both safe and wise to share contacts and activities with youth of differing ethnic backgrounds. A Parent's Workshop will be organized to involve adults in inter-ethnically shared experiences; comparable workshops for youth will be established. Project will seek to involve the New York City Youth Board and its Street and Athletic Club Services on a more direct and continuous basis in order to relate youth and family. Services of community mental hygiene experts will be sought through a canvassing of area facilities.
Duration: Not reported.
Investigator(s): Joseph L. Maniscalco, Project Director, South Brooklyn Improvement Council, Inc., 750 President St.; and Dr. Abraham Blumberg, Research Consultant, Assistant Professor of Sociology, Department of Sociology and Anthropology, Brooklyn College, Brooklyn, N. Y. 11210.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KP-1 ASSESSMENT OF THE COMMUNITY DELINQUENCY CONTROL PROJECT OF THE DIVISION OF PAROLE

Purpose: To determine if there is any difference in parole performance of wards released directly to an intensive parole program in the community as compared with wards institutionalized and then released to a regular parole program.
Subjects: Wards committed to the California Youth Authority by Juvenile Court from the project area in Los Angeles. (N=200 experimentals plus controls, yearly).
Methods: Random assignment to experimental (project) or control (regular program) condition; collection of relevant data on wards, program, and parole outcome.
Duration: March 1966-indefinite.

Investigator(s): Bertram M. Johnson, B.A., Senior Social Research Analyst, and Esther M. Pond, B.A., Associate Social Research Analyst, Division of Research, California Youth Authority, State Office Building No. 1, Sacramento, Calif.
Publication: Progress reports will be made yearly, beginning with the Summer of 1967. Findings will be published when available, beginning no sooner than 1969, by the Research Division of the California Youth Authority.

21-KP-2 COMMUNITY DAY-CENTER PROGRAM OF THE LOS ANGELES COUNTY PROBATION DEPARTMENT

Purpose: To modify personal difficulties and behavior of children of low income families, who would otherwise require twenty-four hour residential care and treatment, to the extent that the evident need for institutional placement will be circumvented.
Subjects: Children from low income families in the Los Angeles area.
Methods: Children are brought to the centers and returned home daily. Intensive counseling procedures with individuals and groups of children, remedial education, group activities, and family conferences are the significant elements of the program. It is assumed that greater personal competence, a more positive self-image, and improvement in the quality of family life will result. Program is geared for a six-month cycle, at the end of which it is anticipated that most children may be "graduated" to the regular program of probationary supervision and returned to their community school.
Findings: Brief experience with first center has demonstrated that boys and their families have developed a positive identification with the program and its aims.
Duration: March 1966-continuing.
Investigator(s): Stephen W. McAtee, Supervising Deputy Probation Officer, Community Day-Center Project, Suite 170, P. O. Box 4002, Los Angeles, Calif. 90012.
Cooperating group(s): Special Schools Section, Los Angeles County Board of Education; Economic and Youth Opportunities Agency, Los Angeles, Calif.; U. S. Office of Economic Opportunity.

21-KP-3 A COMPARATIVE STUDY OF THE ATTITUDES OF PROBATION OFFICERS AND OF MEMBERS OF PROBATION COMMISSIONS IN BELGIUM

Purpose: To discover if basic differences which would affect the way in which probation is utilized and applied do exist between the various categories of people charged with the administration of probation.
Methods: Psychometric and sociometric tests are used to discover whether the change from traditional repressively authoritarian treatment of delinquents to rehabilitative methods has modified the basic attitudes and emotions of probation officers. Their test scores are compared with other groups, such as probation commission members, including magistrates, civil officials, and lawyers, and students of the State Institute of Social Studies.
Duration: May 1965-January 1967.
Investigator(s): Judge Séverin-Carlos Versele, 30 Avenue Brugmann, Brussels 6, Belgium. (Reported by NCCD.)
Cooperating group(s): Institute of Sociology, Free University of Brussels; Institut d'Etudes Sociales de l'Etat, Belgium.

21-KP-4 JUVENILE COURT DEMONSTRATION PROJECT

Purpose: To demonstrate a means of changing the theoretical orientation, the diagnostic process, and the treatment program of the juvenile court.
Subjects: Delinquents in a selected neighborhood in New York City.
Methods: A small experimental unit has been established to penetrate, describe, and assess a selected neighborhood in terms of the delinquency-producing cultural and organizational patterns therein which are contributing to the illegal behavior of the children living in the area. Based upon results obtained from the community assessment, it will establish a local community action program whose function is to alter neighborhood delinquency-producing patterns. These assessment and program procedures complement and run parallel to the standard social and psychiatric study procedures and supervision ordinarily given to delinquents coming from the experimental area who are placed on probation by the Juvenile Term of the Family Court of New York.
Duration: 1966-1968.
Investigator(s): John M. Martin, Professor, Department of Sociology and Anthropology, Fordham University, Bronx, N. Y. (Reported by NCCD.)
Cooperating group(s): Graduate School of Social Work, New York University; New York City Family Court; New York City Office of Probation; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KQ-1 CITIZENS' COMMITTEE ON YOUTH: YOUTH WORKER PROGRAM

Purpose: To test hypothesis that, by extending group work services to clusters of disadvantaged youngsters at an early age, one can enhance their social and cultural opportunities and re-direct them toward acceptable channels and outlets.
Subjects: Boys and girls, ages 10 to 14, who show adjustment problems and are referred by school, police, or social service agencies.
Methods: Children are assigned to a professionally supervised volunteer Youth Worker responsible for six to eight children with whom he meets at least twice a week. Programs are designed to enhance the youngsters' interests in acceptable activities and include athletic events, dances, camping, movies, plays, bowling, discussions, etc.
Findings: Schools report improvement. Three of the 15 groups have attained a high enough degree of social maturity and cohesiveness to function as autonomous, responsible groups and have been transferred to existing youth-serving agencies such as a church and a neighborhood house.
Duration: June 1965-1968.
Investigator(s): Murray Weisman, Associate Director, The Citizens' Committee on Youth, 909 Plum St., Cincinnati, Ohio. (Reported by NCCD.)

21-KR-1 RESIDENTIAL TREATMENT CENTER FOR JUVENILE OFFENDERS

Purpose: To demonstrate the effectiveness of Opportunities, Inc., a non-profit service organization which provides a community residential treatment program as an alternative to probation or commitment to a state training school.
Subjects: Boys, ages 13 to 16, who have been adjudged delinquent by the family court, whose personal, home, or community situation contraindicates probation, but whose behavior problems are not serious enough to require commitment to a state training school. Boys are referred by the family court, subject to acceptance by the professional staff.

Methods: Group and individual counseling; use of community services including schools, medical, psychiatric, and psychological services and private and public social agencies; aftercare. Minimum length of stay is about three months.
Duration: May 1966-June 1968.
Investigator(s): Carlton H. Gregory, 51 Governor Bradford Dr., Barrington, R. I. (Reported by NCCD.)
Cooperating group(s): Office of Law Enforcement Assistance, U. S. Department of Justice.

21-KR-2 EVALUATION OF CHANGES IN TECHNIQUE OF TRAINING IN A CLOSED BORSTAL

Purpose: To evaluate effectiveness of changes in techniques in a closed borstal in terms of subsequent behavior of adolescents during first three years after release.
Subjects: Older adolescents in a closed borstal.
Methods: Traditional regime has been changed to one based upon individual training and treatment programs for each inmate. Tests, questionnaires, interviews, and prediction techniques are being used to assess individual change and response. A sociological study of the regime throughout the period is also being made.
Duration: January 1963-December 1969.
Investigator(s): F. H. McClintock and A. E. Bottoms, Institute of Criminology, Cambridge University, 7 West Rd., Cambridge, England. (Reported by NCCD.)
Cooperating group(s): Prison Department, Great Britain Home Office.

21-KR-3 AN ALTERNATIVE TO INSTITUTIONALIZATION FOR DELINQUENT BOYS

Purpose: To rehabilitate delinquent boys through a group-centered treatment program combining discussion and work activities as an alternative to institutionalization.
Subjects: Randomly selected 16- and 17-year-old boys who would ordinarily be assigned to Mayaguez Industrial School.
Methods: Boys divide their time between paid work experience in the morning and compulsory attendance at afternoon group sessions designed to give them the opportunity of "talking out" problems with their peers. Unstructured discussion sessions permit free exchange of ideas, and boys are provided insights into conditions which contributed to their delinquency. The community-based work experience program provides an opportunity for the acquisition of good work habits, a sense of cooperation with others, and an adjustment to the discipline of working a fixed number of hours each day. The concept of allowing the boys to return home evenings and weekends provides continuous opportunities for working out problems within each youth's own environment. Remedial education and vocational placement are provided in cooperation with a variety of community institutions. As each youth is released from the program, a replacement is added. Boys completing the program will be invited to continue their participation in the group sessions.
Duration: Not reported.
Investigator(s): Awilda Lopez, Assistant Professor, Department of Public Health and Preventive Medicine, School of Medicine, University of Puerto Rico, San Juan, P. R. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KR-4 A PROGRAM FOR THE TREATMENT OF DEFECTIVE DELINQUENTS

Purpose: To expand a program found helpful in dispersing the pessimistic atmosphere surrounding treatment for those individuals with the double limitations of mental retardation and severe behavioral problems.
Subjects: Defective delinquents at Oregon Fairview Home.
Methods: A program has been established based on educational and psychological principles and primarily focused on those behavioral manifestations displayed in the ward which make the individual delinquent unacceptable in other living situations. Intensive individual treatment is given each delinquent by all levels of staff. Patients are also given work experience.
Findings: Program effected favorable changes in earlier group of patients exhibiting dangerous aggressive behavior.
Duration: 1963-continuing.
Investigator(s): Dr. D. L. Callicrate, Oregon Fairview Home, 2250 Strong Rd., S.E., Salem, Ore. (Reported by NCCD.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-KR-5 HOME AFTERCARE PROGRAM FOR BOYS DISCHARGED FROM CORRECTIONAL INSTITUTIONS

Purpose: To open a halfway house for boys recommended for release from correctional institutions who have no approved home to which they may go. Project is based on assumptions that (1) social restoration of a delinquent boy requires that he be part of a family; (2) the natural home can be helped to meet and maintain minimum standards for the boy's return; and (3) when this fails, the boy can be matched with a foster family trained to carry the transitional role for successful social restoration.
Methods: A special foster family recruitment program is conducted in Negro, white, and interracial neighborhood groups and churches which have common associations. These provide natural groups for training and a structure of support for the families and boys. Foster families will become involved in future recruitment and training of other foster families. Evaluation will cover such questions as: (1) can such homes be found; (2) is the predicted chain reaction initiated; (3) can the concepts of social restoration be validated.
Duration: Not reported.
Investigator(s): William F. Bussiere, Friends Neighborhood Guild, 703 North Eighth St., Philadelphia, Pa. 19123. (Reported by NCCD.)
Cooperating group(s): Franklin House, Philadelphia; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KR-6 INCENTIVE PAYMENTS FOR EMPLOYMENT PROGRAMS FOR YOUTHFUL MISDEMEANANTS

Purpose: To test the effectiveness of providing work adjustment experiences for youthful misdemeanants who, as a group, generally receive little training during their incarceration due to their relatively short and varying sentences.
Subjects: Youthful misdemeanants at the District of Columbia Workhouse.
Methods: Through the Special Services for Offenders Program, work adjustment experiences will be provided for misdemeanants. On the basis of these experiences, recommendations to employees can be made by a job developer connected with the Misdemeanant Program. In order to insure releasees money to support themselves until their first paychecks, a wage

incentive program has been conceived by which men earn money which will be put in their own accounts in a Credit Union, and given to them upon release, with counsel of a money management counselor.
Duration: Not reported.
Investigator(s): James G. Banks (formerly) Executive Director, and Hugh K. Johnson, Director, Division of Delinquency and Crime Control, United Planning Organization; Ulysses G. Garland, Assistant Superintendent of Workhouse, and Ray Nelson, Assistant Director, Department of Corrections, Washington, D. C.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KS-1 REHABILITATION OF DELINQUENT BOYS

Purpose: To make a comparative analysis of the effectiveness of four rehabilitative programs for delinquents: Probation; Essexfields (a non-residental group-centered program); Highfields (a residential group-centered program); and Annandale (the State Reformatory).
Subjects: 1,210 16- and 17-year-old males from one county with no previous institutionalization, and without severe mental retardation or disturbance; processed by same juvenile court.
Methods: Social background data, delinquency history, and Minnesota Multiphasic Personality Inventory profiles obtained on boys processed by court and sent to above programs, from January 1962 to 1965. All boys followed up for in-program failure and recidivism after completion of treatment to January 1966. Post-MMPI's were given after treatment and compared with pre-MMPI's. Rates of recidivism were determined for each program for all boys who completed treatment and for matched groups across programs. Various other types of treatment of data were made.
Duration: January 1962-March 1967.
Investigator(s): Richard M. Stephenson, Ph.D., Chairman, Department of Sociology, Douglass College, Rutgers, The State University, New Brunswick, N. J. 08903.
Cooperating group(s): Ford Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Ford Foundation report in preparation; report on MMPI data submitted to National Institute of Mental Health.

21-KS-2 THE REHABILITATION OF DELINQUENT RETARDATES

Purpose: To demonstrate and evaluate techniques for rehabilitating delinquent retardates; to modify and eliminate undesirable, antisocial behavior and to develop more adequate personal, social, recreational, educational, and vocational skills, so that the delinquent retardate may lead a relatively productive life in the community.
Subjects: One cottage unit of 20 boys and one of 20 girls.
Methods: Techniques based on the principles of reinforcement are applied within a controlled environment where conditions for learning are optimal. The resident's freedom and responsibility will gradually be increased, enabling him to learn to behave appropriately in situations which are similar to those existing in the community.
Duration: February 1966-January 1969.

Investigator(s): J. F. Elliott, M.D., Superintendent, Medical Department; John D. Burchard, Ph.D., Assistant Professor, Clinical Psychologist, Psychology Department; and B. G. Tate, Ph.D., Research Psychologist, Psychology Department, Murdoch Center, Butner, N. C. 27509.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-KS-3 OUTWARD BOUND AS AN ALTERNATIVE TO INSTITUTIONALIZATION FOR JUVENILE DELINQUENTS

Purpose: To demonstrate the efficacy of the Outward Bound Schools and their methods of reducing recidivism among delinquent boys as an alternative to institutionalization.
Subjects: 84 delinquent boys, half of whom will come from the reception center of the Massachusetts Youth Service and half from an institution serving as a halfway house.
Methods: Boys will be exposed to Outward Bound (a crisis-intervention type program) and their progress followed for one year from date of parole. Participating observers, data processing, and parole officers will be used to establish correlations between success or failure of individual boys and those from Outward Bound.
Investigator(s): Joshua L. Miner, III, Outward Bound, Inc., 16 School St., Andover, Mass. 01810. (Reported by NCCD.)
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-KS-4 PARKLAND NON-RESIDENTIAL GROUP CENTER

Purpose: To rehabilitate delinquent male offenders by establishing a conventional culture with resulting non-delinquent values, goals, and behavior; to test hypothesis that more continuity between a rehabilitation program and community life is provided through a non-residential setting.
Subjects: Male offenders, ages 13-1/2 to 15-1/2, from junior high schools in the West End area of Louisville.
Methods: Non-residential group center is located on grounds of a local junior high school. Guided group interaction, regular and remedial education, a work program, intensive group work with the children's parents, and integrated research evaluation. After 7 to 12 months of participation in the program as a condition of probation, each subject is involved in an intensive aftercare program for up to 12 months.
Duration: February 1965-May 1967.
Investigator(s): Newton McCravy, Jr., Project Director; Robert Fishman, Research Director; and James Earl Howard, Financial Officer, Kentucky Child Welfare Research Foundation, Inc., P.O. Box 713, Frankfort, Ky. 40601.
Cooperating group(s): Southfields Residential Group Center; Youth Bureau, Louisville Police Department; Louisville Board of Education; Jefferson County Juvenile Court; Kentucky Department of Child Welfare; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

THE CHILD IN THE FAMILY

Family Relations

21-LA-1 RESEARCH-ACTION ON PREVENTION OF FAMILY DISORGANIZATION

Purpose: To study family disorganization in process by longitudinal research on social functioning of a random sample of young, urban families; to provide multi-faceted, early intervention to families showing emerging malfunctioning in the direction of social disorganization; and to evaluate effect of such intervention by means of an experimental control design.
Subjects: 855 young urban families selected randomly from the register of first births to mothers under the age of 30.
Methods: Panel interviewing of control groups; services, based on a systematic assessment of family need, to the experimental group; periodic evaluation of family functioning of experimental and control group families; research on interventive method using a structural Treatment Log; study of relationship between child-rearing attitudes and practices using PARI scales and other instruments; and analysis of process of families' socialization into client role.
Duration: September 1964-August 1969.
Investigator(s): Ludwig L. Geismar, Ph.D., Professor of Social Work and Sociology, Graduate School of Social Work, Rutgers, The State University, New Brunswick, and Director, Family Life Improvement Project, Child Service Association, 284 Broadway, Newark, N. J. 08903.
Cooperating group(s): Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Social Casework 47:9:563-570, November 1966 (Part I), and 47:10:663-667, December 1966 (Part II). Others in press or in preparation.

21-LA-2 PARENTAL MALEVOLENCE AND CHILDREN'S INTELLIGENCE

Purpose: To confirm preliminary evidence suggesting that parental malevolence or rejection is inversely related to children's intelligence.
Subjects: 451 third-grade children and their parents.
Methods: Determined the product-moment correlations between the California Test of Mental Maturity I.Q.'s of these children, as measured in the classroom, and the independent responses of their parents to four different parental interview indices of parental malevolence. Three relationships between variables mentioned above and parental educational level and socio-economic status were also investigated.
Findings: Parental malevolence and child's I.Q. are negatively correlated. The strongest association between parental malevolence and child's I.Q. occurs between mother-daughter pairs. Linkage between parental malevolence and child's I.Q. is most apparent among parents having less than a high school education.
Duration: March 1960-January 1968.
Investigator(s): John R. Hurley, Ph.D., Professor of Psychology, Michigan State University, East Lansing, Mich. 48823.
Cooperating group(s): School officials of Columbia County, New York; Mental Health Research Center, Rip Van Winkle Foundation, Hudson, New York; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Accepted for publication in Journal of Consulting Psychology.

21-LA-3 THE FAMILY IN THREE TYPES OF SOUTHERN ITALIAN COMMUNITIES

Purpose: To investigate changes in family roles and aspirations under conditions of social change.
Subjects: Adolescent sons, fathers and mothers--160 families, approximately 480 subjects.
Methods: Scheduled interviews; some use of pre-collected statistics.
Duration: 1965-1968.
Investigator(s): Albert D. Ullman, Ph.D., Professor of Sociology, Tufts University, Medford, Mass. 02155.
Cooperating group(s): Centro di Specializzazione e Recerche Economico - Agrarie per il Mezzagiorno, Naples, Italy.
Publication: Papers planned for early 1968.

21-LA-4 PATTERNS OF MOTHER-INFANT CONTACT: THE SIGNIFICANCE OF LATERAL PREFERENCES

Purpose: To explore the functioning and motivations determining the observed left lateral placement of infants by Salk, Weiland, and Sperber.
Subjects: Infants, college students, young mothers, others.
Methods: Mothers are observed holding infants, and methods are compared to methods of holding other, similar sized objects. Exploration is made of the effect of anxiety on lateral placement of objects, of involvement of subjects in fantasy play with objects, noting lateral placement when fantasy stimulation is anxiety versus infant plus anxiety, and of the evaluation of pain (anxiety) threshold on exposure to a variety of auditory stimuli including heartbeat sounds.
Findings: Objects other than infants under neutral conditions were evenly divided in terms of lateral placement.
Duration: 1960-continuing.
Investigator(s): I. Hyman Weiland, M.D., Director, San Fernando Valley Child Guidance Clinic, 7335 Van Nuys Blvd., Van Nuys 91405; and Zanwil Sperber, Ph.D., Chief Psychologist, Department of Child Psychiatry, Cedars-Sinai Medical Center, Los Angeles, Calif.
Publication: *Journal of the American Academy of Child Psychiatry* 3:1, January 1964, and 1967.

21-LA-5 THE TRANSITION TO PARENTHOOD

Purpose: To investigate the influence of parenthood in marriage.
Subjects: 500 couples--100 couples in each of four social class groups having their first child; 50 with no child and 50 having their second child.
Methods: Each couple was interviewed three times--once before and twice after pregnancy--with the nullipara interviewed as one control during the same length of marriage periods. Structured questionnaire used. Improvisation and projective material gathered.
Duration: 1962-1967.
Investigator(s): Harold Feldman, Ph.D., Professor, Department of Child Development and Family Relationships, New York State College of Home Economics, Cornell University, Ithaca, N. Y.; and Joseph H. Meyerowitz, Ph.D., Assistant Professor, Baylor University, Houston, Tex.

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Cooperating group(s): Obstetrics Department, Tompkins County Hospital, New York; Maternity Center Association, New York; Nurse-Midwifery Service, Kings County Hospital, Brooklyn; Clara Elizabeth Fund for Maternal Health, Flint, Michigan; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Research report available from investigators.

21-LG-1 SIBLING ADJUSTMENT TO CHILDHOOD LEUKEMIA

Purpose: To evaluate adaptation of siblings and families to the illness and death of one of its members, a child with leukemia.
Subjects: 50 children under treatment for leukemia, and their parents and siblings.
Methods: As the life span of childhood leukemia has recently increased from an average of three months to over sixteen months, parents are now exposed to the prolonged anxiety of a critically ill child who will experience painful medical procedures, hospitalizations, remissions, and ultimate death. Study attempts to identify those conditions within the family (communication, religion, social stress) and those within the parents and siblings (age, intelligence, personality structure) related to adaptation to the illness. Such an assessment will hopefully permit realization of conditions facilitating and/or inhibiting adaptation of the healthy siblings to the prolonged illness and death of the child with leukemia.
Duration: Not reported.
Investigator(s): Nathaniel N. Wagner, Ph.D., Chief Psychologist, and Brenda D. Townes, M.A., Instructor, Department of Psychiatry, University of Washington; John R. Hartmann, M.D., Director, Division of Hematology and Oncology, and Elspeth Wallace, R.N., Children's Orthopedic Hospital, Seattle, Wash. 98105.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-LG-2 CHANGES IN CHILDREN'S BEHAVIORAL STATUS FOLLOWING ANESTHESIA

Purpose: To investigate the frequency of behavioral changes, negative and/or positive, following inhalation anesthesia and surgery in children, in general, and as a function of different types of pre-medication, ages, and socio-cultural groups and hospitals.
Subjects: 200 children up to 14 years of age undergoing tonsillectomy at three different hospitals in the United States and Canada, and a control group of children undergoing routine physical examinations.
Methods: A questionnaire developed by Vernon and Schulman specifically to test for the more common behavioral upsets is administered to mothers on the morning of the operation or examination and 14 days later. Certain demographic data are also recorded.
Findings: Initial indications are that any changes are difficult to detect and have been considerably overemphasized perhaps because of the retrospective nature of most studies or because separation from parents and surroundings is more important than anesthesia and/or surgery, or because the group is, for the most part, beyond the vulnerable age.
Duration: July 1965-July 1967.
Investigator(s): H. T. Davenport, M.D., Department of Anesthesia, Vancouver General Hospital, Vancouver, British Columbia, Canada; and John S. Werry, M.D., Research Child Psychiatrist, Children's Research Center, and Assistant Professor of Psychiatry, Department of Psychology, University of Illinois, Urbana, Ill. 61801.

Child Rearing

21-MB-1 BREAST FEEDING: INCIDENCE AND TREND IN UNITED STATES HOSPITALS ON EXIT FROM NEWBORN NURSERIES, AFTER TWO DECADES

Purpose: To compare trend in breast feeding over the past ten years with trends established by studies conducted in 1946 and 1956.
Methods: Questionnaires submitted to nursery supervisors in hospitals having a birth census of more than 300 infants per year. Count made of breast-fed, bottle- and breast-fed, and bottle-fed infants. Data also gathered on special care of premature or low-weight infants, age at first feeding and at departure from hospital, etc. Reports catalogued according to States, geographic areas, urban, suburban, or rural locale of hospital. Data compared with findings of the two previous studies.
Duration: Not reported.
Investigator(s): Herman F. Meyer, M.D., Associate Professor, and Robert B. Lawson, M.D., Professor, Department of Pediatrics, Northwestern University Medical School, 4001 Kirk St., Skokie 60016, and Chief of Staff, Children's Memorial Hospital, 707 Fullerton Ave., Chicago, Ill. 60612.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-MB-2 FIFTY FAMILIES STUDY. PHASE II: INFANT ACCIDENT

Purpose: To identify the child-care practices, including neglect and abuse, that may contribute to infant accidents; to identify possible differences between abused and non-abused infants; to ascertain differences between families displaying deviant and adequate child care; to examine and evaluate staff decisions about discharge planning and follow-up care of patients; and to determine factors affecting the actual outcome for patients. (Bulletins 11 and 15, Research Relating to Children.)
Subjects: Between 75 and 100 infants under 13 months of age and living in a family, who are presented to Children's Hospital of Pittsburgh for X-ray following a traumatic episode.
Methods: On the basis of a research interview of the mother in the home and pediatric and behavioral evaluation, infants are selected for longitudinal study. Longitudinal study involves: second research interview of the mother in the home, interview of father, observation of mother feeding baby, mailed questionnaire, a fifth step not yet determined, final evaluation of the baby, and a final interview with the parents.
Duration: October 1964-September 1968.
Investigator(s): Elizabeth Elmer, M.S.S., Director, Infant Accident Study, Children's Hospital, and Instructor; Grace S. Gregg, M.D., Assistant Clinic Professor; John B. Reinhart, M.D., Associate Professor of Child Psychiatry; and Byron Wight, M.A., Research Associate, Department of Pediatrics, Graduate School of Public Health, School of Medicine, University of Pittsburgh, Pittsburgh, Pa. 15213.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Papers will be published as sections of the research are analyzed. Final publication will probably be in the form of a monograph.

21-MC-1 INFANT STIMULATION--PARENT EDUCATION PROJECT

Purpose: To demonstrate a way in which early intervention into the lives of babies might break the poverty cycle; to attempt to simultaneously raise the chances that the infant will reach a higher level of intellectual functioning and that the adults who mother him will gain in competence and feelings of self-worth.

Subjects: 200 "disadvantaged" mothers and their infants born at the J. Hillis Miller Health Center, University of Florida, between June 1966 and February 1967.

Methods: Fifteen women drawn from same population are trained in series of stimulation experiences, interview techniques, and observation procedures. Each of these women parent educators is placed with 10 families, whom she visits weekly. There are two control populations, one not visited, and one visited by nurses but not receiving instructions in stimulation.

Findings: Starting at end of three months of instruction (baby's six-month birthdate) stimulated babies indicate greater ability to perform perceptual-motor tasks.

Duration: June 1966-September 1967.

Investigator(s): Ira J. Gordon, Ed.D., Professor, and Director, Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Fla. 32601.

Cooperating group(s): Funds for the advancement of education; Colleges of Medicine, Nursing, Health Related Services, University of Florida.

Publication: Various educational and psychological journals.

SOCIO-ECONOMIC AND CULTURAL FACTORS

21-NB-1 HUMAN RESOURCE DEVELOPMENT AND MOBILITY IN THE RURAL SOUTH

Purpose: To ascertain occupational, residential, and social aspirations and expectations of representative samples of high school youth in the southern United States; to determine, through a longitudinal survey, major factors and influences of the decision-making process of youth and how these are related to their aspirations and expectations. Further, to follow up these youth to determine what relationship may exist between their aspirations and expectations while in high school and their future occupational and social behavior and the related causal factors.
Subjects: Representative samples, by sex, race, residence, and type of school, of Georgia high school students, particularly those in 10th grade.
Methods: Forced-response type questionnaires have been devised and administered to groups of students in selected high schools in 1966. Schedules will be administered in other selected schools. Data regarding school and community have been collected on separate schedules. Data for 1966 have been coded, punched on IBM cards, tabulated, and are now being analyzed in terms of certain basic hypotheses regarding aspirations, expectations, and decision-making process of youth.
Findings: Responses by 10th graders in one low income rural county support the hypothesis that Negro youth have aspirations and expectations far beyond those of their parents, as well as beyond opportunities ordinarily available to them. Responses are almost identical with those of white respondents, although the latter come from more advantaged parents, in terms of marital stability and educational and occupational achievement. Negro youth view military service as an opportunity for advancement rather than as something undesirable, and Negro males, along with Negro and white females, would rather work inside, and with people, whereas white males would rather work outside and with things.
Duration: July 1965-June 1970.
Investigator(s): John D. Kelley, Ph.D., Associate Professor of Sociology and Agricultural Economics, University of Georgia, Athens, Ga. 30602.
Cooperating group(s): This is part of the Cooperative Regional Project. The major cooperating groups in this particular phase of the S-61 Southern Regional Rural Sociology Research Project are at Louisiana State University, Mississippi State University, Clemson University, and Texas A. & M. University. Alabama, Florida, North Carolina, and Tennessee will also be cooperating. U. S. Department of Agriculture.
Publication: Georgia Agricultural Experiment Station Bulletins, Cooperative Southern A.E.S. Regional Bulletins, journal articles, and miscellaneous reports will be published.

21-NE-1 ALTERNATIVES TO VIOLENCE: ALIENATED YOUTH AND CIVIL RIGHTS, RIOTS AND THE ANTI-POVERTY PROGRAM

Purpose: To find out about the participation of teenagers alienated from major community institutions, in civil rights activities, riots, and relevant anti-poverty programs, and what they mean to the youth. Recommendations are developed to try to better relate these young people to such institutions and to help them make the transition to healthy adulthood.

Subjects: Small number of groups of alienated youth.
Methods: Interviews were held in nine large cities across the country. A small number of groups of youth were interviewed, but primary reliance was placed on sessions with adults who are highly knowledgable about alienated youth, such as street workers, probation officers, educators, staff of human relations groups, civil rights leaders, staff of Neighborhood Youth Corps, etc. The cities visited were: Boston, Chicago, Cleveland, Detroit, Los Angeles, New York, Philadelphia, Rochester, New York, and Washington.
Findings: With a small number of exceptions, alienated youth in these large cities did not participate in an organized and continued way in civil rights activities. Emotionally and socially, however, these movements did influence the youth. There were many indications of their participation in riots (Watts, Rochester, etc.). They did not plan the violence but were caught up in the excitement. Very small numbers of alienated youth were reported as going to the Job Corps camps. Much larger numbers participated in and benefitted from the Neighborhood Youth Corps, subject to significant limitation. In some of the cities there were impressive examples of locally designed projects financed with Office of Economic Opportunity funds.
Duration: July 1966-October 1967.
Investigator(s): Saul Bernstein, M.S.W., Professor and Head of Group Work Department, School of Social Work, Boston University, 755 Commonwealth Ave., Boston, Mass. 02215.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Book to be published by Association Press, late in spring or early in summer of 1967.

21-NE-2 STUDENT MOBILITY IN SELECTED MINNEAPOLIS PUBLIC SCHOOLS: FACTORS ASSOCIATED WITH DIFFERENT DEGREES OF STUDENT MOBILITY

Purpose: To investigate certain factors related to high and low geographic mobility.
Subjects: Sixth grade children from low income families in downtown Minneapolis and children from families of above average incomes living in the outlying areas of the city.
Methods: Comparisons of high and low mobility students in divergent economic areas.
Findings: Profile of the low mobility inner-city youth revealed that he was of average intelligence and reading ability for his grade and less inclined to be absent, delinquent, or non-white than the highly mobile child living in his neighborhood. However, he was four times as likely to be excessively absent and three times more likely to be delinquent than the child with a stable residence in a high income neighborhood. The chances that he came from a "normal" home were about the same as those for the highly mobile youngster living in the wealthier part of the city, better than for the mobile youngster in his own neighborhood, and worse than for the wealthier child of average mobility.
Duration: 1963-1966.
Investigator(s): R. W. Faunce and Bonnie J. Murton, Youth Development Project, Chicago at Sixth St., Minneapolis, Minn. 55415. (Reported by NCCD. See Note, p. 73.)
Cooperating group(s): Minneapolis Public Schools; Community Health and Welfare Council of Hennepin County; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-NE-3 STUDENT MOBILITY IN SELECTED MINNEAPOLIS SCHOOLS: MOBILITY OF ELEMENTARY SCHOOL CHILDREN IN HIGH AND LOW DELINQUENCY AREAS

Purpose: To describe geographic and school mobility of two samples of elementary school children.
Subjects: 373 students from Youth Development Project target areas, which are characterized by high rates of delinquency, broken homes, dependency, and poverty; a comparison group of 425 students from areas of Minneapolis with low delinquency rates.
Methods: Analysis of school and police records to obtain background and mobility information.
Findings: There were substantial differences between the two groups for factors which were relatively free from bias of middle class value orientation (e.g., race, family size, birthplace) as well as those which were not (e.g., intelligence test and reading test scores). Target area school children had changed schools and homes twice as often as students in comparison sample. (By the time he has reached the sixth grade, target area student has, at the minimum, lived in three homes and attended three schools.) Three out of ten target area children remained in same school from kindergarten through sixth grade, as compared to the six out of ten who continued in same school for this period from the comparison group. Target area students usually remained in same school for 45 consecutive months out of a possible 70, while the typical comparison group student had 58 consecutive months in the same setting. Target area children have, on the average, missed 100 days of education by the time they reach the sixth grade.
Duration: 1963-1966.
Investigator(s): R. W. Faunce, M.A., Research Director; Donald D. Bevis; and Bonnie J. Murton, Youth Development Project, Chicago at Sixth St., Minneapolis, Minn. 55415. (Reported by NCCD. See Note, p. 73.)
Cooperating group(s): Minneapolis Public Schools; Community Health and Welfare Council of Hennepin County; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-NE-4 LOWER EASTSIDE ACTION PROJECT, INC. (LEAP)

Purpose: To attempt to close the gap between the underachieving youth of the urban ghetto and their potentialities by providing relevant alternatives to resignation and failure.
Methods: Emphasis is placed on natural group development and self-determination, one-to-one relationships with staff, easy access to adult support, programming as determined by member interest, and the development of a social commitment. Project will address the problems of individuation, education, and social action, a major goal being the participation of youth in the solution of their own community's problems, allowing for their development as an effective and constructive force for change.
Duration: June 1966-not reported.
Investigator(s): Laurence S. Cole, Director, and Muzafer Sherif, Consultant for Research and Evaluation, Lower Eastside Action Project, Inc., 44 East 3rd St., New York, N. Y. 10003.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-NG-1 KIBBUTZ PERSONALITY IN THE SECOND GENERATION

Purpose: To examine personality development in an Israeli collective settlement (kibbutz). It is a follow-up and expansion of the research carried out on the same kibbutz some 16 years ago by Professor Melford E. Spiro of the University of Chicago. (See Research Relating to Children, 6-K-3.) The long-term personality development of the generation examined by Spiro is being assessed while a similar evaluation is being made of the development of the youngest generation of children, the children of the former subjects.
Subjects: Entire population of second and third generation children and adults currently residing in the kibbutz.
Methods: Methods range from informal observation carried out in the process of participant observation to more formal interviewing and psychological testing, both projective and non-projective.
Duration: June 1966-June 1968.
Investigator(s): Leslie Y. Rabkin, Ph.D., Assistant Professor of Psychology, University of Rochester, Rochester, N. Y. 14627.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles, monographs or books, and papers are planned, beginning in 1968.

21-NG-2 A STUDY OF CULTURAL ATTITUDES TO DISABILITY OF CHILDREN IN ISRAEL, THROUGH THE USE OF THE PICTURE RANKING TEST

Purpose: To measure the acceptability of various social and physical handicaps among children in Israel stemming from different cultures through the use of the Picture Ranking Test; to compare these attitudes to those of Jewish and other children in the United States as reported by S. A. Richardson; to assess to what extent the Picture Ranking Test is an index of cultural behavior, and its importance as a scientific tool in cross-cultural studies.
Subjects: Children ages 10 and 11, in 10 different groups numbering about 100 each, and with approximately equal numbers of boys and girls.
Methods: Groups represent upper and lower social classes, Arabs, children of Israeli parents, new immigrants, urban and rural areas, ultra-orthodox, and children with parents from five different cultural groups--East Europe, Middle East, Yemen, North African, and English-speaking countries. Children are tested with identical technique used in America. Demographic data are gathered and findings subjected to statistical analysis.
Duration: September 1965-September 1966.
Investigator(s): E. Chigier, M.R.C.P.E., D.C.H., Pediatrician, and Miriam Chigier, B.A., School Health Service, Department of Education of Tel Aviv, 40 Joseph Zvi Street, Ramat Gan, Israel.
Cooperating group(s): Association for the Aid of Crippled Children.

21-NG-3 EDUCATIONAL ACHIEVEMENT AND LIFE STYLES IN A TRADITIONAL SOCIETY (OLD ORDER AMISH)

Purpose: To formulate the value orientation of the society, describe the socialization patterns in the context of the culture in a traditional community and in an emerging community, to discover the achievement levels of pupils in schools, and to discover the areas of conservation, deprivation, and social change.

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Subjects: Several midwestern communities sufficiently large enough to include traditional life styles as well as emerging life styles and communities.
Methods: The value orientation of the culture will be formulated from historical documents and by interviews with members of the contemporary community. The observation of behavior within the recognized age-sets will be done by a resident anthropologist in the field. This requires complete participation in the traditional community for all ages from infancy to adulthood, and of formal as well as informal culture. The school testing phase will center on measures of ability, intelligence, self-perception, and non-verbal exercises. Social change will be studied in three aspects: values retained, values intensified, and values rejected.
Duration: June 1966-August 1969.
Investigator(s): John A. Hostetler, Ph.D., Professor of Anthropology and Sociology, Temple University, Philadelphia, Pa. 19122.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report is planned.

21-NG-4 SPANISH URBAN MIGRANT FAMILY STUDY

Purpose: To discover changes which occur in Spanish-American patterns of child rearing in the process of adjusting to urban life, and to examine possible causes of these changes, such as adoption of new reference groups by migrant families, reactions to strains of urban living, or changes in family structure and physical environment.
Subjects: Six Spanish-American and six Anglo-American families in Denver, Colorado, and six rural Spanish-American families in the San Luis Valley, all from similar socio-economic backgrounds, with at least one child enrolled in Project Head Start.
Methods: Three one-hour observations of interactions between each mother and one of her pre-school children and several structured, semi-structured, and open-ended interviews will be conducted. Final study will increase length of direct observations and will include fathers, if possible. Measures include indices of identification with Anglo or Spanish reference groups, preference for Anglo or Spanish family norms, child-rearing expectations, attitudes and methods, and family structure.
Findings: Certain statistically significant Spanish-Anglo differences in parental attitudes and behavior are consistently found, in line with what would be expected from ethnographic reports. A number of urban-rural differences were also found between the two Spanish groups. Explanations for these differences are still being explored.
Duration: September 1965-June 1969.
Investigator(s): Nancy B. Kitts, Ph.D. Candidate, Institute of Behavioral Science, University of Colorado, Boulder, Colo. 80304.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Publication in preparation.

21-NG-5 THE AINU OF HOKKAIDO, JAPAN

Purpose: To record the ethnography, insofar as this is still possible, customs, and beliefs in the rearing and development of the child life of the Ainu.

Methods: Ethnographic field method: interviews, participation, observation of parental and environmental influence, as told primarily by the old Ainu men and women.
Duration: May 1965-1968.
Investigator(s): Sister M. Inez Hilger, Ph.D., Research Associate of the Smithsonian Institution, and Special Lecturer in Anthropology, College of St. Benedict, St. Joseph, Minn. 56374.
Publication: National Geographic, February 1967. Book planned for 1968; edited tapes of Ainu conversation and songs; and picture book of Ainu in action.

21-NG-6 STUDY OF DIFFERENT CULTURAL VALUES HELD FOR PHYSICAL ACTIVITY

Purpose: To investigate cross-national differences in the role of physical activity and sport in the life style of secondary school students in Australia, England, Canada, and the United States.
Subjects: Approximately 1,000 subjects were selected from the school population of one large city in each of the four countries. The sample included boys and girls representing two levels of attainment: grades 10 and 12 in Canada and the United States, 4th and 6th forms in England, and 3rd and 5th forms in Australia. Each sample was representative of the full range of intellectual ability and socio-economic status.
Methods: During 1966, three inventories were administered designed to elicit data on: attitude toward, and interest in, six classes of sport and physical activity; major social values; leisure time use, by self and family; number of siblings; birth order; national origin; social class; religious preference; need for approval; self-esteem, and body image, perceived and ideal. Data from these variables permitted the testing of a number of hypotheses concerning factors associated with attitude toward, and interest in, physical activity.
Findings: Preliminary findings are expected to be available by June 30, 1967. Further analysis will be undertaken during July and August.
Duration: September 1965-August 1967.
Investigator(s): Gerald S. Kenyon, Ph.D., Associate Professor, Department of Physical Education, School of Education, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Administrators and teachers in the school systems of Perth, Australia; Birmingham, England; Edmonton, Canada; and Cleveland, Ohio, U.S.A.; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: A complete report will be available from principal investigator at termination of project. Manuscripts representing various aspects of the study will be prepared and submitted for publication.

21-NG-7 THE SOCIALIZATION OF THE CHILDREN OF EUROPEAN IMMIGRANTS IN TORONTO, CANADA

Purpose: To investigate the influence of parental background and length of residence in Canada on socialization patterns, family roles, and value conflict; to investigate the influence of socialization patterns and value conflict on motivation, cognitive development, and social relationships of adolescents from immigrant families.
Subjects: At least 600 adolescents of Italian and German origin and Canadian-born controls; also, approximately 200 parents.

Methods: Administration of story completions, projective questions, and scales to adolescents to measure parent-child interaction patterns, achievement values, achievement-risk preference, sociometric choice patterns, family life variables, etc.; parent and family interviews; and content analysis of group discussions among adolescents and parents.

Duration: May 1966-August 1968.

Investigator(s): Kurt Danziger, D.Phil., Professor of Psychology; Kathryn Koenig, Ph.D., Assistant Professor of Psychology; and Clifford Paynton, Ph.D., Assistant Professor of Sociology, York University, Toronto 12, Ontario, Canada.

Cooperating group(s): The Canada Council.

Publication: Publications planned.

21-NG-8 SOCIAL AND CULTURAL VARIABLES AS PERCEIVED BY GERMAN AND AMERICAN HIGH SCHOOL STUDENTS

Purpose: To investigate cross-cultural differences and similarities between German and American youth in the perception and conceptualization of a number of social and cultural variables.

Subjects: 180 high school students sampled from schools in Hamburg, Germany; 180 students sampled from schools in Houston, Texas.

Methods: Data are collected from two sources for each child: (1) factual information concerning sex, age, socio-economic status, study and leisure habits; (2) 22 semantic differential ratings on each of 11 socio-cultural concepts. Groups will be matched on basis of relevant variables. Attempts will be made to contrast "typical" profiles of German and American children.

Duration: July 1966-1968.

Investigator(s): Wiebke Thomsen, M.D., Instructor, and Willy A. Kouw, Ph.D., Assistant Professor, Department of Neurology and Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.

Publication: Journal articles planned.

21-NG-9 MATERNAL CARE AND CHILD BEHAVIOR WITHIN THE STRUCTURE OF THE FAMILY IN JAPAN

Purpose: To identify and describe patterns of maternal care and child behavior in Japanese families; to determine relationship of these patterns to personality development, psychopathology, and the general social structure and social dynamics of Japanese life; to compare results obtained with similar data from other cultures, particularly the United States.

Subjects: Mother-infant pairs from 30 Japanese and 30 American middle class families. Infants were first-born, normal babies, and were three to four months old at time of observation.

Methods: Observation of mother and child in home was carried out on two days by a time-sampling technique devised by Rheingold and resulted in 800 observations on each case over a series of variables measuring behavior of mother and infant. The first 20 Japanese and first 20 American cases were selected for follow-up studies when the children are two-and-one-half and five-and-one-half years old.

Findings: Comparison of Japanese and American infants at three to four months of age indicates that the American baby is more alone, is more active in the manipulation of his body and in the use of objects, and is higher in vocalization. The Japanese baby is less alone, and is both physically and vocally quieter. Japanese mothers direct their actions

toward soothing and quieting their infants, while American mothers encourage response and activity. In Japan, style of life makes a difference in the behavior of infant and caretaker. In both Japan and America, the infant "learns" to pattern his behavior in terms of the cultural expectations of his mother by as early an age as three to four months.
Investigator(s): William Caudill, Ph.D., Chief, and Helen S. Weinstein, Section on Personality Development and Environment, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: In Yearbook of the International Sociological Association, R. König and R. Hill (Eds.), 1966.

21-NG-10 CULTURAL DISCONTINUITY AMONG MISTASSINI CREE INDIANS

Purpose: To study the adaptation of Cree Indian children to radical discontinuity in their life experience occasioned by their removal to a residential school, or their entrance into the day school at Mistassini Post (Quebec, Canada); to understand better the linkages between cultural transmission and cultural change.
Subjects: 10 males and 12 females, ages 10 to 22, educational range from second grade to third year high school. All but one had attended the residential school.
Methods: Subjects were shown a series of 21 line drawings depicting activities instrumental in the Mistassini Cree Indian community to achievement of socio-economic goals and maintenance of life styles. Responses to this Instrumental Activities Inventory indicated relative rank order and value of the various activities depicted. In addition, a number of observations were made of Cree children and their families.
Findings: Subjects rank highest certain activities that fall outside of the traditional framework, such as carpenter, mechanic, and white collar worker. The traditional instrumental activity, trapping, has a median rank order but seems to be regarded as an alternative if other attempts fail. Additional findings.
Duration: Not reported-August 1967.
Investigator(s): George D. Spindler, Ph.D., Professor of Anthropology and Education, and Dr. Louise S. Spindler, Research Associate, Department of Anthropology, Stanford University, Stanford, Calif. 94305.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

EDUCATIONAL FACTORS AND SERVICES

General

21-OA-1 TO STUDY THE EFFECTS OF TEMPERATURE ON LEARNING

Purpose: To test hypothesis that there is no difference in pupil learning in a controlled ideal thermal environment and in a controlled deviate thermal environment.
Subjects: 22 pairs of fifth grade students matched for intelligence test scores, achievement test results, sex, age, and family backgrounds, and divided into experimental and control groups.
Methods: Experimental group was placed in a classroom where an ideal thermal environment ranging from 70°F to 74°F was maintained. The control group was placed in a deviate thermal environment where temperature was kept at a minimum of 76°F. Both customary school subjects and certain selected skills and subject areas were taught. In the selected areas, all teaching instruction to both groups of students was identical. At the end of approximately nine school weeks, the achievement of students in each classroom with regard to selected skills and subject areas was measured. Achievement of students in the ideal thermal environment was then statistically compared to achievement of students in the deviate environment.
Findings: There is no difference between pupil learning in a controlled ideal thermal environment and in a controlled deviate thermal environment.
Duration: August 1965-March 1966.
Investigator(s): Burdette P. Hansen (Ph.D. Candidate, University of Iowa), Manager, Test Services, Measurement Research Center; and Dr. Willard R. Lane, Professor, College of Education, University of Iowa, Iowa City, Iowa.
Cooperating group(s): Saydel School District and Lennox Industries, Iowa; Office of Education, U. S. Department of Health, Education, and Welfare.

21-OB-1 PERCEPTIONS BY COUNSELEES OF VARIOUS PROCEDURAL APPROACHES IN INITIAL COUNSELING SESSIONS

Purpose: To determine the relationship of specific types of cognitive functioning and age level to preferences for defined counseling approaches.
Subjects: 100 ninth grade males, 100 ninth grade females, 100 twelfth grade males, and 100 twelfth grade females, selected at random from a local high school population.
Methods: Five counselors were filmed in five episodes, each representing five different counseling orientations (advising, reflecting, supporting, questioning, and informing) with a male client and female client, resulting in fifty filmed episodes. One set of 25 episodes, to be used with male subjects, showed male counselor and counselee; the remaining 25 episodes, a male counselor and female counselee. Counselee responses were near identical in all episodes, reflecting only differences in male and female

activities. Each subject reviewed five episodes, each having a different counselor and different counseling approach. Episodes were presented at random. Subjects were asked to rate each counselor on three dimensions: helpfulness, understanding, and degree of desired relationship. After this rating, subjects completed Westcott revised Information Demand and Problem Solving Success Scale.
Duration: September 1965-December 1966.
Investigator(s): Oliver H. Bown, Director, and Lewis F. James, Research Associate, Department of Educational Psychology, University of Texas, Austin, Tex. 78712.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report available.

21-OE-1 EARLY DETECTION AND POSSIBLE REMEDIATION OF SPECIAL LEARNING PROBLEMS IN THE FIRST GRADE

Purpose: To compile a series of screening devices which would detect future learning difficulties in the elementary grades; to devise a remediation program for prevention of such learning disabilities through intensified teacher in-service training.
Subjects: 272 first grade pupils, male and female.
Methods: A battery of psychological tests was individually administered by school psychologists. Instruments included: Draw-a-Person (emotional evaluation); Copying of Gesell Figures (perceptual evaluation); Wide Range Achievement Test, Reading Part (academic evaluation); Simple Funnel Test (eye-hand-foot coordination); Inquiry Blank (overall impression through interview technique). Children with potential learning difficulties were selected by the psychologists, and a series of in-service training sessions were subsequently initiated by teams of psychologists. Evaluation teams also included teacher consultants.
Findings: Number of emotionally induced learning problems ranked highest, followed by perceptual problems and mental retardations (suspected).
Duration: 1965-1968.
Investigator(s): Rudolph F. Wagner, Ph.D., Chief Psychologist, Richmond Public Schools, 809 E. Marshall St., Richmond, Va. 23219.
Publication: Mimeographed report on initial findings available from principal investigator upon request.

21-OF-1 SCHOOL REINFORCEMENT BEHAVIOR AMONG LOWER WORKING AND UPPER-MIDDLE CLASS PARENTS OF ADOLESCENTS

Purpose: To determine possible relationships between behaviors of parents and academic achievement of their children in high school; to test hypothesis that no differences exist between school reinforcement behaviors utilized by lower working and upper-middle class parents.
Subjects: 80 parents in a Michigan community with children who are successful in secondary school.
Methods: Parents were interviewed regarding their child-rearing practices in the home as they may affect the education of their children, especially with regard to provision of educational experiences by the family, parental assistance with required homework, reading experiences outside the school, parental interest in child's school activities, family contacts with school personnel and participation in school activities for parents, methods of motivation and control of child's behavior, and parental expectations relative to child's educational achievement.

Duration: June 1965-June 1966.
Investigator(s): Stanley E. Dimond, Professor, and Alwin Coleman, School of Education, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-OF-2 ACHIEVEMENT AND ALIENATION AMONG SIOUX INDIAN SCHOOL CHILDREN

Purpose: To define selected factors which lead to lowered educational achievement and dropout from school among Sioux Indian school children.
Subjects: Approximately 800 Indian children from 7th through 12th grades on the Pine Ridge Reservation in South Dakota; 600 white children from surrounding towns in South Dakota and Nebraska as controls.
Methods: On the basis of a pilot study and some pre-testing, a set of objective items designed to assess alienation and its components, achievement motivation, attitude toward school, and child-rearing experiences was given to subjects; a projective measure of achievement motivation was also used. On the basis of relationships among actual achievement, I.Q., and theoretical alienation scores, about 200 mothers or mother surrogates were selected for follow-up interview. White children were also evaluated for control purposes. Extensive test construction is underway using factor-analytic methods.
Findings: Achievement indices and I.Q.'s for Indian children tend to be lower than those obtained for whites, but are by no means truly severe and are usually well within normal limits. Alienation scores are consistently higher for Indian children than for white.
Duration: September 1965-November 1967.
Investigator(s): Bernard Spilka, Ph.D., Professor of Psychology, University of Denver, Denver, Colo. 80210.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Articles and possibly a monograph.

21-OF-3 EFFECTS OF ENVIRONMENTAL VARIABLES ON THE ACHIEVEMENT OF ELEMENTARY SCHOOL CHILDREN IN TRINIDAD

Purpose: To examine the relationship of educational environment in the home to school achievement; to learn whether achievement could be predicted from a knowledge of the educational environment in the home.
Subjects: 30 girls and 30 boys randomly selected from the standard IV classes of two schools in Trinidad.
Methods: Achievement, intelligence, and social background data were collected from the pupils at their school and interviews were conducted with the parents at home. Data were analyzed by means of the Pearson Product Moment Correlation, and Regression Analyses.
Findings: (1) The educational environment in the home was more closely related than the other variables to school achievement; (2) since the educational environment correlated .78 with achievement and accounted for 60 percent of the variance with respect to achievement, it was thought to be a reliable predictor.
Duration: November 1966-June 1967.
Investigator(s): Patrick B. Dyer, Ph.D., Education Officer, Ministry of Education, Trinidad, West Indies.
Cooperating group(s): University of Alberta, Canada; Government of Trinidad.
Publication: Plan to publish in Trinidad Journal of Education, and Psychology in the Schools.

21-OG-1 PROPERTIES OF THE TEACHER AS A REINFORCING STIMULUS

Purpose: To examine effects of teacher punitiveness and expertise on the efficacy of the social reinforcement emitted.
Subjects: Junior and senior high school students from two schools near Madison, Wisconsin.
Methods: Teacher behaviors were manipulated in tape recordings of a staged high school social studies class. Behaviors leading to impressions of high or low punitiveness and high or low expertise were combined into four different tape recordings (high-punitive, low-expert, high-punitive, high-expert, etc.) High school students listened to recordings, then met the teacher in person in an interview situation. Using social reinforcement (Hmm-mm, Good) teacher attempted to increase the operant rate of first person pronouns.
Findings: Expertise manipulations had no effect on efficacy of social reinforcement. Punitive teachers elicited a significantly higher rate of first person pronouns than non-punitive teachers in a control situation (no reinforcement). Non-punitive teachers elicited a significantly higher rate when using social reinforcement.
Duration: May 1965-June 1966.
Investigator(s): Thomas J. Johnson, Ed.D., Associate Professor, Washington University, St. Louis, Mo.; and Thelma Baldwin, M.S., Research Assistant, Department of Educational Psychology, University of Wisconsin, Madison, Wis.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Technical Report No. 9, Research and Development Center for Learning and Re-education, Madison, Wisconsin.

21-OG-2 ADJECTIVE CHECKLIST AND SYMPTOM CHECKLIST CORRELATES OF "SCHOOL REFUSAL"

Purpose: To evaluate teachers' assessments of personality variables and symptomatic behavior in children referred for psychiatric evaluation with the presenting problem of "school refusal."
Subjects: Children referred to the Division of Child Psychiatry for psychiatric evaluation. Half the children were referred with a presenting problem not involving academic work.
Methods: Teachers were asked to complete adjective checklist and symptom checklist for all children referred to the Division of Child Psychiatry. Correlational analysis is predicted to show (1) specific personality profile configurations for the "school refusal" group; (2) greater severity of symptoms checked for the "school refusal" group than for the controls; (3) greater frequency of negative adjectives checked for the "school refusal" group than for the controls.
Duration: April 1967-1968.
Investigator(s): Willy A. Kouw, Ph.D., Assistant Professor, Department of Neurology and Psychiatry; Douglas B. Radabaugh, Psychiatric Social Worker; and Talaat H. Mohamed, M.D., Assistant Professor and Director of Inpatient Services, Division of Child Psychiatry, University of Texas Medical Branch, Galveston, Tex. 77550.
Publication: Articles planned in educational psychology and psychiatric journals.

21-OG-3 SOME DETERMINANTS OF BEHAVIOR IN NEGRO AND WHITE BOYS

Purpose: To investigate relationships between actual classroom behavior as seen by the classroom teacher and the child's own professed interest in behaving in an acceptable fashion; to compare the classroom behavior of Negro and white boys in relation to definiteness of their boundaries; and to study the influence of the mother's attitude on the formation of the boundary of her son.
Subjects: Normal sample: 45 white boys from normal fifth and sixth grades; 30 Negro boys from normal fifth grade; 40 emotionally disturbed Negro boys of elementary school age and 16 of their mothers; 27 emotionally disturbed white boys and 11 of their mothers.
Methods: Boys are administered 20 response ink blot test (Fisher-Cleveland Instructions) and Social Desirability Scale. Mothers are tested individually. Mothers and teachers rate the boys.
Findings: There was a significant difference between mean Barrier scores of the normal white boys and the normal Negro boys. White boys scored significantly higher. There was no difference between mean Barrier scores for the disturbed white boys, disturbed Negro boys, and the normal Negro boys.
Duration: September 1966-March 1967.
Investigator(s): Rhoda Lee Fisher, Ph.D., Research Psychologist, Syracuse Public Schools, 409 Genesee St., Syracuse, N. Y.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at Eastern Psychological Association Meeting, April 1967. Paper is available in mimeographed form presently; journal publication planned.

21-OG-4 MEASUREMENT OF CHILDREN'S SCHOOL MORALE

Purpose: To develop a conceptualization of school morale, to measure its components, and to relate it to environmental and personality factors.
Subjects: Fifth and sixth graders in Tuscaloosa, Alabama, and junior high students in Tennessee.
Methods: Likert-type scales were constructed to assess each of the following components of school morale: school plant, instruction, administration and regulations, community interest, other students, teacher-student relationships, and general school morale.
Duration: February 1967-August 1968.
Investigator(s): Lawrence S. Wrightsman, Ph.D., Professor of Psychology, George Peabody College for Teachers, Nashville, Tenn. 37203.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Possibly technical reports and journal articles.

21-OG-5 PERSONALITY STRUCTURE IN MIDDLE CHILDHOOD AND PREDICTION OF SCHOOL ACHIEVEMENT AND ADJUSTMENT

Purpose: To confirm earlier research with adults indicating that certain personality dimensions, apart from intelligence, are associated with achievement and adjustment criteria.
Subjects: 267 12-year-old boys and girls.
Methods: Performance tests of personality; factor analysis and factor extension analysis to get estimated correlations between factors and criteria, including certain home background variables.

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Findings: Earlier research appears to be confirmed.
Duration: 1963-1966.
Investigator(s): John D. Hundleby, Ph.D., Associate Professor of Psychology, New York University, New York, N. Y. 10003; and Raymond B. Cattell, D.Sc., Research Professor, Department of Psychology, University of Illinois, Urbana, Ill. 61801.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Monograph of the Society for Research in Child Development, late 1967.

21-OH-1 EDUCATIONAL VALUES IN CONTRASTING RURAL COMMUNITIES OF LOW INCOME AREAS

Purpose: To attempt to determine factors other than income in selected rural communities that account for wide variation in percentages of high school graduates who continue formal education.
Subjects: All high school students and teachers in ten communities in Kansas counties. Five of these communities send a small percentage of high school graduates on to college; five, a larger percentage. Sample also includes parents of all seniors, community leaders, and editors of local newspapers.
Methods: Questionnaires are administered to all high school students and teachers in the ten communities. These schedules include Rosenberg's Self-Esteem Scale and a 10-point scale to measure, in part, "Attitude Toward a College Education." Interviews are held with parents of all seniors in the sample, community leaders, and editors of local newspapers. These include Chapin's Social Participation Scale, and Srole's Anomia Scale. Educational news in community and school newspapers is measured and classified to compare the emphasis placed on entertainment and non-entertainment school functions and on recognition of student accomplishments.
Duration: April 1966-September 1967.
Investigator(s): Lowell Brandner, Ph.D., Professor of Technical Journalism; Joan Sistrunk, M.A., and Amy Schindler, B.A., Research Assistants, Department of Technical Journalism, College of Agriculture, Kansas State University, Manhattan, Kan. 66502.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Publication planned in education, counseling, and journalism journals.

21-OI-1 RELATIONSHIP BETWEEN DROPPING OUT OF HIGH SCHOOL AND IDENTIFICATION WITH REFERENCE GROUP MEMBERS

Purpose: To examine both the structure and processes operative in families of dropouts as perceived by them and their parents; to test hypothesis that there are certain intrafamilial characteristics which influence a youth's premature withdrawal from school.
Subjects: High school dropouts.
Methods: Examination of degree of integration of families from which dropouts come, degree of identification dropouts have with members of their families; reference groups of the dropout, values of dropout and his parents toward education and other related variables; and a comparative analysis of dropouts and those who remain in school.
Duration: Not reported-June 1968.

Investigator(s): Edward Z. Dager, Ph.D., Professor of Sociology, and Judith Bootcheck, Graduate Student, Department of Sociology, Purdue University, Lafayette, Ind. 47907.
Cooperating group(s): Purdue University Research Foundation.

21-OJ-1 PARENT EDUCATION IN POSITIVE MENTAL HEALTH

Purpose: To determine the relative effectiveness of educating mothers in principles of mental health to the degree that wholesome modifications in the behavior of their sons are noted.
Subjects: 60 mothers of six- and seven-year-old boys selected in school as having behavior problems.
Methods: First and second grade teachers in one school district recorded 15 specific aggressive behaviors of type needing improvement noted among boys in their classes in one-month period. Ninety boys with three or more critical incidents in a four-week period were identified as potential subjects. Their mothers were interviewed to determine willingness to participate in a 24-hour course of instruction in positive mental health principles and practices. The first 70 of the 90 who expressed interest and readiness to participate, and were willing to grant permission for psychological evaluation of their subject sons, became subjects. Of the 70, 60 are active subjects, and 10 are alternates to allow for attrition due to moving or otherwise dropping out. All 70 boys are evaluated by a qualified clinical psychologist in October 1966, April 1967, and October 1967. This is done "blind": the psychologist does not know who is an experimental or control subject and will have no reference to his earlier recorded appraisal in second and third studies. Teachers use a research-developed record of behaviors to be encouraged (wholesome) and behaviors to be improved (unwholesome) for one calendar year on all 70 boys. First experimental group consists of 20 chance-selected mother subjects who began a 12-session course of instruction in October 1966. A group of 40 mothers plus alternates had no course work and served as controls for six months. A second group of 20 mothers, randomly selected from among the original 60 plus alternates, are enrolled in the same course of instruction and sessions conducted from April to June. This is the second experimental group with 20 controls and alternates. A post-hoc course will be conducted in November 1967 for "controls" to comply with interests expressed in October 1966. Data will consist of psychologist's evaluation of boys at the start, midway, and end of calendar year plus positive and negative behavior in that time; October 1966 pre-test of all mothers; and post-course test for mothers at end of course. Data of primary interest will be behavior of boys with comparison of experimentals and controls on same scales, by same teachers, and same clinical psychologist.
Duration: September 1966-December 1967.
Investigator(s): Frederick A. Zehrer, Ed.D., Director, Mental Health Research Program, American Institutes for Research, Station A, P.O. Box 11487, Palo Alto, Calif. 94306.
Cooperating group(s): Cupertino Union Elementary School District, Cupertino, California; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Written report planned.

21-OJ-2 SOCIAL-PSYCHOLOGICAL CHARACTERISTICS OF RECIPIENTS OF A PARENT DISCUSSION GROUP PROGRAM

Purpose: To investigate certain social-psychological characteristics of recipients of a community parent education program, including parents' perceptions of the program, their motivations for enrolling, their assessment of the program, and an evaluation of the impact of the program. Parents who completed the program will be compared with parent dropouts on the above variables.
Subjects: 179 parents enrolled in 19 Parent Discussion Groups during the 1963-1964 academic year.
Methods: Source of data consisted of companion questionnaires, part one administered at the beginning of the program and part two at the end. Part one contained eight items designed to elicit factual information such as age, sex, occupation, education, and nine items dealing with attendance, source of information, perceptions, and motivations. Part two contained twelve items dealing with attendance, perceptions, assessment, and impact, and ten items from the Dominating Scale of Shoben's Parent Attitude Survey. For parents who dropped out, the questionnaire was converted into an interview schedule containing the same information with the addition of three items dealing with reasons for and time of dropping out.
Findings: The program reaches young mothers with young children who are relatively well educated and quite active in community organizations. Parents viewed the program in a manner consistent with the way it had been portrayed, had reasonably clear ideas as to how they expected to benefit, and were motivated by a wide range of concerns about their children. Assessment was primarily favorable. That the program had a positive impact was seen in the self-involvement and self-modification which was stated to have taken place in a significant number of the parents.
Duration: 1963-1967.
Investigator(s): Fortune V. Mannino, Ph.D., Project Director, Mental Health Study Center, National Institute of Mental Health, 2340 University Blvd. E., Adelphi 20783; and Margaret M. Conant, Ph.D., Coordinator of Parent-Teacher Study Groups, Board of Education, Prince George's County, Upper Marlboro, Md.
Publication: Maryland Parent-Teacher, March 1967. Other reports to be submitted to professional journals.

21-OJ-3 THE EFFECT OF PARENTAL INVOLVEMENT ON THE SCHOOL SUCCESS OF YOUNG CULTURALLY DEPRIVED CHILDREN

Purpose: To assess effect of parental involvement in schooling of young deprived children; to compare this effect with effect of planned curriculum change.
Subjects: Parents of 20 entering kindergarten children.
Methods: Children are selected utilizing previously determined sociological and psychological variables. Small parent education and discussion groups.
Duration: November 1966-September 1967.
Investigator(s): James L. Olson, Ed.D., Associate Professor, University of Wisconsin, Milwaukee 53211; and Richard G. Larson, M.A., Assistant Curriculum Coordinator, Unified School District No. 1, Racine, Wis.
Cooperating group(s): Johnson Foundation, Racine, Wis.
Publication: Articles planned for appropriate educational journals.

21-OK-1 SCHOOL DESEGREGATION VIA COMPULSORY PUPIL TRANSFER: ITS IMPACT ON ELEMENTARY SCHOOL PUPILS

Purpose: To evaluate compulsory bussing to overcome de facto segregation: its initial impact on academic, personal, social, and emotional characteristics of young children.
Subjects: About 3,000 elementary pupils, including those transferred from a school closed because of de facto segregation, and those attending schools to which the former were transferred.
Methods: Special testing of pupils, using a variety of instruments (parent interviews, etc.) in a three-phase program producing data (1) prior to the school closing, (2) within a month of accomplished transfers, and (3) at end of first post-transfer school year.
Duration: May 1965-September 1967.
Investigator(s): Patricia M. Carrigan, Ph.D., Director of Research, Ann Arbor Public Schools, 1220 Wells St., Ann Arbor, Mich. 48104.
Cooperating group(s): New World Foundation; University of Michigan Institute for Social Research; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Results to be reported to granting agencies and in professional journals.

21-OK-2 EFFECTS OF OCCASIONAL INTERRACIAL VISITS ON PUPILS' ATTITUDES

Purpose: To determine effects on attitudes of moving white pupils to Negro schools, or Negro pupils to white schools for a one-day visit.
Subjects: Several thousand elementary and high school pupils in Chicago area schools.
Methods: At the initiative of teachers, principals, district superintendents, or even students, visits from one school to another in the Chicago metropolitan area take place to study common subject matter, to share experiences, to listen to each other's songs or poetry, to report on school studies or projects.
Findings: Teachers and students are developing more realistic knowledge of the greater Chicago metropolitan area. Attitude changes appear minimal.
Duration: September 1963-1968.
Investigator(s): Morris L. Haimowitz, Ph.D., Director; George Ricks, Ph.D., Assistant Director; and Dan Muller, M.A., Staff Member, Bureau of Human Relations, Chicago Public Schools, 228 N. LaSalle St., Chicago, Ill. 60602.

Specific Skills

21-PA-1 DEVELOPMENTAL ASPECTS OF THE CONCEPT OF ADDITION

Purpose: To identify relevant variables which affect the formation of the concept of addition of whole numbers in first grade children.
Subjects: First grade children selected at random from large populations.
Methods: Administration, individually, of tests which describe cognitive characteristics which affect the formation of the concept of addition of whole numbers.
Findings: Significant variables which affect concept formation of addition are: (1) action in the problems vs. no action; (2) presence of aids vs. absence of aids; (3) terminology used to describe sets involved in an addition problem; (4) lack of children's ability to apply knowledge of addition facts to physical situations; (5) conservation of numerousness; and (6) I.Q.

Duration: 1964-completed.
Investigator(s): Henry Van Engen, Ph.D., Professor of Education and Mathematics, and Leslie P. Steffe, Ph.D., Research Associate, Research and Development Center for Cognitive Learning, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Technical Reports Nos. 4, 5, and 21, Research and Development Center for Cognitive Learning.

21-PA-2 THE PROBLEMS OF UNDERACHIEVEMENT AND LOW ACHIEVEMENT IN MATHEMATICS EDUCATION

Purpose: To test the abilities of a selected group of underachievers and low achievers from grades four to six to function on three levels of the concrete-abstract continuum in the conceptual areas of linear measurement and place value; to make an intensive analysis of each student using the case study technique.
Subjects: 12 underachievers and 11 low achievers in mathematics from grades four to six.
Methods: Tests on different abstract levels were administered to each student to determine his ability to function on different levels. Psychological and sociological data were obtained from observation, teacher and parent interviews, cumulative records, California Test of Personality, and Wechsler Intelligence Scale for Children.
Findings: The ability to function on different abstract levels of the mathematics was not a function of whether the student was a low achiever or an underachiever. No consistent pattern was evident; hence, this appears to be an individual student problem. The underachiever of this study comes from an unstable home which is centered around high achievement. The home places excessive stress on school grades and college preparation. When the underachiever of this study was confronted with high anxiety situations, his performance was lowered considerably. The low achiever in this study has personal and social adjustment problems, poor family relationships, and bad school behavior. His academic development is below par.
Duration: September 1965-November 1966.
Investigator(s): Dwain E. Small, Ed.D., Associate Professor of Education, University of Florida, Gainesville, Fla. 32603.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report submitted to Office of Education.

21-PB-1 PROGRAMMED TUTORING OF ELEMENTARY READING

Purpose: To develop a teaching technique for beginning reading to be used as a supplement to classroom teaching and as a research tool for further studies relevant to the teaching of reading.
Subjects: Various levels of retardates in Fort Wayne, Ind., State School and in public school systems of Fort Wayne, Bloomington, and Indianapolis. Major field testing with lower third of first grade classes in inner city school in Indianapolis.
Methods: Principles of programmed instruction are applied to the "programming" of tutors instead of teaching machines. Technique is adaptable to any basal reading series. Non-professional (i.e., high school education only) tutors are used.

Findings: Programmed tutoring appears highly effective, particularly with children who are generally regarded as "slow learners" or "slow starters."
Duration: 1960-1970.
Investigator(s): Douglas G. Ellson, Ph.D., Professor of Psychology, Indiana University, Bloomington, Ind. 47401.
Cooperating group(s): Ford Foundation; National Institute of Child Health and Human Development and National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Reading Research Quarterly 1:1:77-127, Fall 1965; other interim and final reports and articles are planned.

21-PB-2 FIRST GRADE READING INSTRUCTION

Purpose: To test hypotheses that there will be no significant difference in change in reading achievement level of pupils (1) who are low, average, or high in reading readiness, or (2) who come from low, average, or high socio-economic groups, who are subjected to a non-graded reading program and pupils who are subjected to the developmental basal reading program.
Subjects: Approximately 800 first grade pupils of Asheville, N. C. city schools.
Methods: Non-graded and developmental basal reading programs were used. Reading achievement level was measured by Gates Reading Readiness Test, administered in September 1965, and Gates Primary Reading Readiness Test, administered in May 1966. A between-group comparison to test each hypothesis will be made by utilizing the Student's "t" test for independent groups. A two-tailed test of significance utilizing the .05 level of confidence will be applied.
Duration: Not reported.
Investigator(s): Dr. R. E. Robinson, Department of Instruction, Asheville City Schools, Box 7347, Asheville, N. C.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-PB-3 PREVENTIVE MEASURES TO REDUCE READING RETARDATION IN THE PRIMARY GRADES

Purpose: To investigate the effectiveness of specialized reading instruction and in-service education as a supplement to classroom instruction for second grade low-reading groups.
Subjects: Second grade children in Cedar Rapids public schools who have been qualified as slow readers as determined by a cumulative score on the beginning-of-the-year reading achievement test, and whose Lorge Thorndike is 85 or above.
Methods: Three major methods groups are established with ten classrooms using each method. One group is the Basal Reader group (BR), another the Basal Reading In-Service Training group (BRIT), and the third the Supplemented Basal Reading In-Service Training group (SBRIT), which is divided into two sub-groups: SBRIT-2 and SBRIT-1. SBRIT-2 special group children are matched individually with SBRIT-1 children within each classroom according to age, I.Q., and degree of reading retardation. SBRIT-2 children share same program and teacher with SBRIT-1 children. In addition, SBRIT-2 children receive approximately 30 minutes per day of individual and small group (2-3 children) reading instruction outside the classroom. Beginning and end-of-year score comparisons are made between reading achievement scores of two major methods groups (BR and BRIT) and SBRIT and two groups identified for subsequent comparisons that were above cut-off points on September test using analysis of variance.

Duration: August 1965-June 1966.
Investigator(s): Hale C. Reid, Director of Reading Research, Cedar Rapids Public Schools, Cedar Rapids, Iowa.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-PB-4 A PLAN FOR IMPARTING BILINGUAL SKILLS TO MONOLINGUAL SPEAKERS OF HAWAIIAN PIDGIN IN THE KINDERGARTEN, FIRST, SECOND, AND THIRD GRADES, THROUGH LINGUISTICALLY ORIENTED PEDAGOGICAL TECHNIQUES

Purpose: To test the effects of materials and methods based on the TESL (Teaching English as a Second Language) audiolingual approach on small children who come to school as monodialectal speakers of a non-standard variety of English. The dependent variable is oral speech proficiency. Independent variables are mental maturity, and scholastic achievement in several areas.
Subjects: Children in kindergarten through grade three of the Keaukaha School, 90 percent of whom are residents of homes on Hawaiian Homes Commission lands, and whose speech patterns are homogeneous.
Methods: Contrastive Linguistic Analysis is used to determine phonological and grammatical patterns not in the children's native dialect. These patterns are embedded in episodes, or lessons, in a sequential and cumulative fashion, for presentation to the children through a demonstration-practice pedagogical procedure. Classroom teachers are apprised of results of the Contrastive Linguistic Analysis, process of lesson writing, and best techniques for demonstration-practice procedure, including ways of transferring targets out of the lesson materials into spontaneous and real life language expression. Developing speech patterns of the children are sampled twice each school year and subjected to the criterion measure, a newly developed instrument for rating oral proficiency.
Findings: Preference as friends is correlated with ability in standard oral English. Mental maturity (CTMM) scores increased an average of 10 points for 1965-1966 third graders over their 1964-1965 scores. Oral proficiency can be measured and fine distinctions made.
Duration: September 1965-October 1969.
Investigator(s): Dale P. Crowley, M.S., Education Officer, State Department of Education, P.O. Box 1922, Hilo 96720; and Howard P. McKaughan, Ph.D., Associate Dean of the Graduate Division, and Director, Pacific Asian Language Institute, University of Hawaii, Honolulu, Hawaii 96804.
Cooperating group(s): Hawaiian Homes Commission of the State of Hawaii; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Final report at completion of project.

21-PB-5 PRE-SCHOOL PREDICTION OF LATER SPECIAL READING DISABILITY

Subjects: Pupils entering first grade.
Methods: Children are given tests thought to be predictive of future reading disability. They will be followed through grade school and their reading ability assessed at intervals. Correlation between reading ability and tests will be made at a later date.
Duration: February 1966-indefinite.
Investigator(s): John B. Isom, M.D., Associate Professor of Pediatrics and Neurology, University of Oregon Medical School, Portland, Ore. 97201.
Cooperating group(s): United Health Foundation, Inc.; Office of Education, U. S. Department of Health, Education, and Welfare.

21-PB-6 NATIONAL STUDY OF WORD-BLIND CHILDREN

Purpose: To investigate incidence and nature of severe, specific reading disabilities in young children and to relate them to the mother's personal and social history, as well as to the child's own history, including events just prior to and during his birth.
Subjects: All those children taking part in the National Child Development Study (1958 cohort) who, at age seven, were unable to read despite the fact they they are thought to be of normal intelligence.
Methods: A detailed examination will be made of the data on the above sample.
Duration: October 1966-December 1967.
Investigator(s): A. Sen, Ph.D., Senior Research Officer, National Bureau for Co-operation in Child Care, Adam House, 1 Fitzroy Square, London, W.1., England. (Reported by M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Co-operation in Child Care.)
Cooperating group(s): Financed by a grant from the Children's Research Fund.
Publication: Probably in *Studies in Child Development*, National Bureau for Co-operation in Child Care.

21-PB-7 A LONGITUDINAL STUDY OF BOYS ENROLLED IN THE SCHOOL IN ROSE VALLEY, MOYLAN, PENNSYLVANIA, BETWEEN 1930 AND 1948, FOR COMPARISON OF THE EDUCATIONAL AND VOCATIONAL CAREERS

Purpose: To test the hypothesis that dyslexic boys, so diagnosed between the ages of 6 and 12, have necessarily poorer prospects for success in higher education and vocational achievement than have non-dyslexic boys.
Subjects: 56 boys; all of those enrolled in a single private elementary school for normal children for three years or more during the years 1930-1947; boys and/or close kin interviewed in 1964-1965. Range from very high language to extreme dyslexia.
Methods: Record search, interviews, data analysis by IBM processing, and statistical analysis; comparison of individuals and groups ranked by age and by language learning facility related to dyslexia, as defined by Orton and successors; comparison on several variables, including educational achievement and vocational status at time of follow-up; incidental studies of socio-economic background; childhood Binet I.Q.'s of dyslexics and non-dyslexics, with pairs of subjects matched for life histories and adult accomplishments; analysis of pairs and trios of siblings.
Findings: Data processing and analysis completed with respect to major objectives: 20 boys judged highest in childhood language learning facility relative to dyslexia patterns had completed 5.4 years of college and graduate school work; 16 boys of medium facility had completed 5.7 years higher education; 20 moderately to severely dyslexic subjects achieved 6.0 years; differences in vocational status in same order. These differences were statistically non-significant; thus, the hypothesis was rejected.
Duration: October 1964-completed.
Investigator(s): Margaret B. Rawson, M.A., Reading Consultant, Montgomery County Easter Seal Treatment Center, 1000 Twinbrook Parkway, Rockville, Md.
Cooperating group(s): Easter Seal Research Foundation, National Society for Crippled Children and Adults, Chicago, Ill.; Hood College, Frederick, Md.
Publication: *Academic Therapy Quarterly* 1:3, 1966; *Bulletin of the Orton Society* 5:16, 1966. *Hood College Monograph No. 2* planned in 1967.

21-PB-8 AN EXPERIMENTAL READING PROGRAM FOR EXCEPTIONAL CHILDREN

Purpose: To establish a reading program for exceptional children to develop a 155-word basic sight vocabulary. Reading program utilizes programmed lessons presented on a teaching machine. Focus of program is on getting the child ready to read while he is actually learning to read.
Subjects: 26 subjects divided into four groups: (1) neurologically impaired, (2) educable mentally retarded, (3) emotionally disturbed, and (4) autistic.
Methods: Program procedures consisted of a five-part lesson based upon words introduced in each chapter of the Ginn Basic Readers. For correct responses the subject was given an extrinsic reward, at first on a continual basis and later on a periodic basis. Words were introduced and reviewed as follows: (1) visual discrimination of new words, (2) auditory discrimination of new words, (3) readback of the new words, (4) visual recall of new words, and (5) phrase reading. At first, reinforcement was given on a continuous basis (1:1) and later on a 1:5 ratio. In addition to the tangible rewards, the child was given a token reward for each correct response. Ultimately, a 1:200 ratio was established.
Findings: A record was kept of all subject responses, and progress was ascertained by means of correct response rate and total responses per minute. Data indicated that presence or absence of candy as a reward had no significant effect on subject's functioning. A "take-away" condition had no significant difference in correct responses. Amount of time given to an educable mentally retarded child appeared to increase the correctness of responses.
Duration: July 1963-continuing.
Investigator(s): Frank M. Hewett, Ph.D., Assistant Professor of Education and Medical Psychology; Donald Mayhew, M.A., and Ethel Rabb, M.A., Teachers, Neuropsychiatric Institute School, University of California, Los Angeles, Calif. 90024.
Publication: American Journal of Orthopsychiatry 37:35-48, 1967.

21-PB-9 THE EFFECTIVENESS OF EMPHASIZING READING SKILLS IN AN ENGLISH COURSE FOR UNDERACHIEVERS

Purpose: To study an adjusted English curriculum designed for children who are not achieving in accordance with their intellectual potential; to investigate the effectiveness of emphasizing reading skills as part of an English curriculum with a consequent de-emphasis in English content.
Subjects: Three matched groups of children who are not achieving in accordance with their intellectual potential.
Methods: One group is instructed in reading skills; another group is given English instruction adjusted to the academic underachiever, and the third is included within regular English classes. Pre- and post-assessments will be made in reading, grammar, essay writing, and attitudes, and the three groups will be compared in these areas after one academic year.
Duration: Not reported.
Investigator(s): Robert Emans, Temple University, Philadelphia, Pa.; Raymond S. Urbas, Staff Psychologist, Milwaukee Public Schools, Milwaukee; Helen Johnson, Teacher, and Eugene Lynch, Director of Instruction, West Bend Public Schools, West Bend, Wis.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-PB-10 LETTER SOUNDS AS HEARD BY BILINGUALS

Purpose: To ascertain desirability of different introductory words in beginning readers for Spanish-speaking children.
Subjects: 50 experimental and 50 control pre-school children.
Methods: Children indicate whether combination letter sounds, that do not spell or say anything, sound alike or not.
Duration: Summer 1966-1967.
Investigator(s): Marion Cline, Ed.D., Associate Professor of Education, Texas Western College, El Paso, Tex. 79999.

21-PD-1 ABILITY OF CERTAIN PUPILS TO UNDERSTAND AND APPLY SELECTED CONCEPTS AND GENERALIZATIONS IN GEOGRAPHY

Purpose: To determine (1) whether culturally advantaged primary grade children are able to understand and apply geographic concepts and generalizations; (2) whether these concepts and generalizations can be best understood and applied through instruction involving inductive, deductive, or intuitive approaches; and (3) which primary grade is most appropriate to begin this type of program.
Subjects: Approximately 300 primary grade children from a high socioeconomic suburban community in the northeastern United States.
Methods: Learning experiences are designed to include inductive, deductive, and intuitive approaches to the development of understanding and application of the selected concepts and generalizations. A criterion test has been constructed. Subjects in experimental group are pre-tested, exposed to one of the three types of instructional approaches, and post-tested. Subjects in control groups are pre- and post-tested. Analysis of covariance test is applied to determine if significant differences exist among independent variables, three methods of instruction, grade level, sex, and the dependent variable, post-test scores. Pre-test scores and intelligence test scores are used as covariates.
Duration: Not reported.
Investigator(s): Richard C. Wallace, Jr., Ed.D. Candidate, Boston College, Chestnut Hill, Mass. 02167.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Special Education

21-QB-1 AN EXPERIMENTAL JUNIOR HIGH SCHOOL

Purpose: To attempt to adapt the curriculum of an experimental school to the interests and abilities of students who have been nominated by their teachers as potential dropouts.
Subjects: 45 students from a Minneapolis junior high school.
Methods: The experimental junior high school is located in an old printing shop several blocks from its parent school. Students are taught by a faculty of seven.
Duration: 1964-continuing.
Investigator(s): R. W. Faunce and Bonnie J. Murton, Youth Development Project, Chicago at Sixth St., Minneapolis, Minn. 55415. (Reported by NCCD. See Note, p. 73.)

Cooperating group(s): Minneapolis Public Schools; Community Health and Welfare Council of Hennepin County; Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare; U. S. Office of Economic Opportunity.

21-QC-1 THE FAIRFAX PLAN--A WORK-STUDY PROGRAM FOR THE RETARDED

Purpose: To evaluate effects of work-study program (WSP) at secondary school level for borderline and mildly mentally retarded youths by identifying variables which contribute to relationship between curriculum content, response to training, and adequacy of job performance.
Subjects: 200 experimental and 75 control subjects, both sexes, 15 to 18 years in chronological age, 60 to 84 in WAIS or WISC I.Q., with academic achievement three or more years below grade level placement.
Methods: WSP objective is to train youths for employment by providing specialized curriculum, vocational counseling prior to leaving school, varied pre-vocational work experiences, and workership skills that increase ability to adapt to changing occupational demands as opposed to specific training aimed toward early development of occupational specialty. Experimentals are enrolled in WSP and controls in regular high school program. Twelve tests or rating scales are administered in battery which includes measures of intelligence, academic achievement, social and emotional maturity, visual-motor coordination, vocational interest, knowledge, and capacity, and subjective response to program. Design is of repeated measurements type. Specific questions are aimed at determining degree to which WSP results in graduates having significantly different (1) levels of academic achievement, (2) adjustment in social and emotional areas, (3) attitudes toward employment, (4) habits of work performance, and (5) levels of economic self-sufficiency when compared to controls and WSP dropouts.
Duration: January 1966-December 1968.
Investigator(s): Bernard J. Cameron, M.S., Director of Research, Work-Study Program for the Retarded, Fairfax County School Board, 10515 School St., Fairfax, Va. 22030.
Cooperating group(s): Virginia Department of Vocational Rehabilitation; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Two progress reports, July 1966 and February 1967, include results and analyses of trends in data and are available by writing principal investigator; other reports at approximately six-month intervals.

21-QC-2 EFFECTS OF "EXTRA" SPECIAL EDUCATION ON MENTALLY RETARDED AND SLOW-LEARNING CHILDREN

Purpose: To develop creative and divergent thinking in retarded and slow-learning children, to re-motivate interest in learning, and to involve parents in program for back-up.
Subjects: 30 mentally retarded and slow-learning children, I.Q.'s 50 to 85.
Methods: Small classes of six children each are held for three hours a week over and above regular special class. Material is oriented toward high interest and individualized for each child.
Findings: Improvement in grades in all subjects, general personality improvement (more gregarious and socially oriented), and more interest of parents noted by attendance at conferences.
Duration: February 1966-June 1968.

Investigator(s): Lawrence H. Weiner, Ed.D., Director of Special Education, Barrington Public Schools, 217 Lincoln Ave., Barrington, R. I. 02806.
Publication: Digest of Mental Retardation 3:1:8-11, Fall 1966; presented at Council of Exceptional Children Conference, St. Louis, 1967.

21-QC-3 RELATIONSHIP OF VOCATIONAL OUTLOOK AND SPECIAL EDUCATIONAL PROGRAMS FOR ADOLESCENT EDUCABLE MENTALLY HANDICAPPED

Purpose: To investigate the relationship between vocational outlook of high school educable mentally handicapped (EMH) students and the type of high school programs in which they were found.
Subjects: 373 EMH students, 202 males and 171 females, ages 13 to 21, attending 32 special classes in Illinois high schools.
Methods: Vocational outlook of EMH students was measured by a Could You Ever scale, a group test constructed for this study. School programs were rated on a Program Criteria Index. Data were collected from school records on each student's age, sex, race, I.Q., reading achievement level, work experience history, father's occupation, and father's educational level. Non-parametric techniques (rank correlation and chi-square) were utilized in analysis of data.
Findings: Rank correlations failed to reveal relationships between vocational outlook of the students and nature of the program in which they were enrolled; additional findings.
Duration: February-August 1966.
Investigator(s): Philip R. Jones, Ed.D., Director of Special Services, Champaign Community Unit 4 Schools, 705 South New St., Champaign, Ill. 61820.
Publication: Limited copies of report available from investigator for $3.00, from University Microfilms, or ERIC Clearinghouse on Exceptional Children.

21-QD-1 PREVENTION THROUGH EARLY DETECTION IN HIGH HAZARD AREAS

Purpose: To develop an in-service program focusing upon behavioral manifestations; to provide an objective clear basis for referral for treatment; and to evaluate treatment modalities.
Subjects: 61 pupils from five parochial schools in central Harlem, referred to a child guidance clinic, and 28 teachers.
Methods: Treatment modalities which contrasted the traditional parent and child scheme with parent only, child only, and control groups, were established in a school setting.
Findings: Based on attitudinal and informational questionnaires, a significant change in attitude toward acting-out and withdrawn behavior was found; reliable differences among the four treatment groups were found on selected psychological dimensions.
Duration: September 1964-August 1966.
Investigator(s): John F. Walsh, Ph.D., Director of Research; Rita D'Angelo, Ph.D., Director of Education; and Thomas Brockbank, M.D., Staff Psychiatrist, Catholic Charities Guidance Institute, 122 E. 22nd St., New York, N. Y. 10010.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at Eastern Psychological Association meeting, April 1967; copies available from Catholic Charities Guidance Institute.

21-QD-2 EDUCATION OF BEHAVIORALLY DISORDERED CHILDREN IN THE PUBLIC SCHOOL SETTING

Purpose: To develop effective and economical methods whereby behavioral problems and academic deficiencies of behaviorally disordered children can be remediated within a special class setting in a public school.
Subjects: Children, ages six to ten, referred because of behavior disorders.
Methods: Three classes will be operated in collaboration with a local public school in which methods and techniques, following generally from reinforcement and social learning theory, can be tested. Concurrently studied will be techniques in behavior modification, curriculum development, and instructional methods.
Duration: June 1966-May 1970.
Investigator(s): Herbert C. Quay, Ph.D., Research Director, Children's Research Center, and Professor of Psychology, and Larry K. Brendtro, Ph.D., Assistant Professor of Special Education, University of Illinois, Urbana, Ill. 61801.
Cooperating group(s): Urbana Public Schools; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Exceptional Children 32:509-515, 1966.

21-QD-3 "NO WALLS TO CLIMB": ADJUSTING THE SCHOOL PROGRAMS IN THE PRIMARY GRADES FOR CHILDREN WITH PSYCHOLOGICALLY BASED LEARNING PROBLEMS

Purpose: To aid primary teachers in identification of children whose psychological problems impair their ability to learn.
Subjects: 12 children.
Methods: Meetings with teachers of primary children; gathering of related data, including annotated bibliography.
Duration: 1964-completed.
Investigator(s): Zelma Parker, M.S.W., Guidance Consultant; Alice McMaster, M.A., Curriculum Consultant; and Phyllis Brislawn, M.A., (formerly) School Psychologist, Sheldon School District, Contra Costa County Department of Education, 75 Santa Barbara Rd., Pleasant Hill, Calif.
Publication: Probably December 1967.

21-QE-1 SUPPORTIVE INTERVENTIONS FOR HIGHER EDUCATION AMONG STUDENTS OF DISADVANTAGED BACKGROUNDS

Purpose: To increase supply of high school and college graduates and leaders who come from severely disadvantaged backgrounds; to test hypothesis that significant modification in educational behavior of students is related to amount and type of supports provided by extra-school groups.
Subjects: Three panels of 57 to 75 seventh and eighth graders, one each in the summers of 1964, 1965, and 1966.
Methods: Subjects attend a six weeks residential program of curricular and co-curricular supports in English, science, social science, and mathematics. The major goal of this residential program is one of enrichment and stimulation for further academic work. Residential program is followed with a continuing flow of curricular and advisory-informational supports through graduation from high school, to encourage talented individuals to complete plans for higher education. In the experimental design a randomly chosen set of students, an equivalent set of unchosen students from the same schools, and a matched and/or equivalent set of students from uninvited schools of similar type are compared. Third

group of students from uninvited schools will allow assessment of amount of "contamination" within "treated" schools. All groups will be followed for five years. A series of measures will be employed to assess utility of predictive measures involved in selecting "talented" students, involving both academic performance and attitude and self-conception measures.
Duration: Not reported.
Investigator(s): J. Milton Yinger, Professor of Sociology; Kiyoshi Ikeda, Assistant Professor of Sociology; Frank Laycock, Professor of Education; and John M. Antes, Assistant Professor of Education, Oberlin College, Oberlin, Ohio.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Childhood Education 43:6:370, February 1967.

21-QE-2 AN INVESTIGATION OF THE EFFECTS OF MONTESSORI PRE-SCHOOL TRAINING ON PERCEPTUAL AND COGNITIVE DEVELOPMENT OF DISADVANTAGED CHILDREN

Purpose: To assess effects of Montessori pre-school kindergarten training on perceptual and cognitive developmental patterning of disadvantaged children.
Subjects: Disadvantaged children from pre-school years into early primary grades.
Methods: Longitudinal evaluation of a Montessori-trained versus non-Montessori-trained population, where training effects will be compared at successive age/developmental levels and differing stages of training. There will be a specific investigation of training effects with respect to perceptual-visual and visual-motor abilities, patterns of intellective function (general intelligence and behavior characteristics relating to concentration, persistence in problem-solving, achievement set), and reading readiness and achievement patterns.
Duration: Not reported.
Investigator(s): Barbara Berger, Ph.D., Research Associate, Center for Urban Education, 33 W. 42nd St. and Alan Cohen, Ph.D., Assistant Professor of Education, Yeshiva University, 55 Fifth Ave., New York, N. Y.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

21-QE-3 INTELLECTUAL STIMULATION OF CULTURALLY DEPRIVED INFANTS

Purpose: To test hypothesis that the relatively low I.Q.'s of slum children when they enter school at age six are due to cultural deprivation rather than to heredity, and that the effects of this cultural deprivation can be counteracted by systematic intellectual stimulation in the form of a home tutoring program.
Subjects: Experimental and control groups, each composed of 30 male Negro infants, ages 15 months to 3 years, all from slum areas.
Methods: Subjects are evaluated at 14 months, prior to tutoring. From 15 to 36 months, infants in the experimental group are visited by staff members for one hour a day, five days a week. Staff members try to stimulate infants by talking to them, playing games, using toys, taking them on trips, etc. Chief emphasis is on linguistic training. Infants in both groups are tested again at 21, 27, and 36 months to determine if, when, and in what specific abilities differences between groups emerge. The Bayley tests are used for the younger children, and the Stanford-Binet for the older ones. Data are collected on the course of intellectual, social, and emotional development of the child and on his social and cultural environment to determine the sequence and correlates of intellectual growth.

Findings: Preliminary results, though tentative, suggest confirmation of the hypothesis. The tutored experimental infants seem to do significantly better than the untutored control group.
Duration: September 1965-August 1968.
Investigator(s): Paul H. Furfey, Ph.D., Co-Director, Bureau of Social Research, Catholic University of America, Washington, D. C. 20017.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Possibly a preliminary report; final report expected late in 1968.

21-QE-4 A PROJECT TO INCREASE THE PROPORTION OF YOUNG PEOPLE IN LOCAL SCHOOLS WHO CONTINUE THEIR EDUCATION BEYOND HIGH SCHOOL

Purpose: To engage young people in a disadvantaged area in educational programs best suited to their interests and potentialities; to evaluate program in terms of higher education and post-high school employment.
Subjects: Students in a disadvantaged area in Philadelphia plus a random set of controls from local schools.
Methods: Demographic data are collected on all subjects and controls. Comparison of changes in academic behavior are made between subjects and controls, and there is extensive record-keeping on activities of all members of the project.
Findings: The grade point average of girls who had contact with the program improved significantly over the course of the school year, while that of the controls did not.
Duration: June 1965-June 1968.
Investigator(s): David Nowlis, Ph.D., Assistant Professor, Bryn Mawr College, Bryn Mawr 19010, and Consultant, and Susan D. Shubin, M.S.S., Director of Research, Threshold Program, Friends Neighborhood Guild, 703 N. Eighth St., Philadelphia, Pa. 19123.
Cooperating group(s): Rockefeller Foundation; Carnegie Foundation.
Publication: Data and results available from Mrs. Susan D. Shubin.

21-QE-5 INTENSIVE LANGUAGE INSTRUCTION, EXPERIENTIAL DEVELOPMENT, AND GUIDANCE PROJECT--"HIGHER HORIZONS 100"

Purpose: To demonstrate, through an experimental center at ninth grade level, the effect of compensatory services upon disadvantaged pupils possessing reasonable academic potential but deficient in language skills.
Subjects: 96 pupils, approximately equal number of boys and girls, and whites and non-whites, selected for emotional stability, at least average mental ability, and performing below norm in reading and English language functions.
Methods: Pupils were placed in a self-contained unit and were scheduled as a group for intensive English, civics, and general science. One period each day was allocated to team planning and individual pupil conferences or remediation; another period was shared on alternate days by a reading and a speech specialist. The sixth period was allocated to a non-group academic elective. In addition, pupils were involved in a highly correlated cultural exposure together with the intensive services of an assigned counselor.
Findings: Adjustments are required in the selection of students and organization of the program for coming years; there were no appreciable changes in measured I.Q. scores during the first year; there was a significant improvement in measured reading achievement, writing skills, and academic achievement test scores.

Duration: September 1965-indefinite.
Investigator(s): Robert J. Nearine, Ed.M., Coordinator of Evaluation, Hartford Board of Education, 249 High St., Hartford, Conn. 06103.
Cooperating group(s): State of Connecticut.
Publication: Data available in mimeographed form from Research and Publication Department, Hartford Board of Education.

21-QE-6 PARENTS' PERCEPTION OF HEAD START

Purpose: To determine parents' perception of Head Start aims and goals, and parent participation in Head Start at the end of the January 1966 semester.
Subjects: 50 parents randomly selected from the Milwaukee area. All parents had one or more children enrolled in Head Start Centers.
Methods: Two school social workers conducted individual interviews with parents in their homes. A structured interview technique was employed. Responses to a questionnaire were classified into reasons given for enrollment of children, degree of parent involvement, parents' perception of help given the child and family, and parents' suggestions for improving the program.
Findings: Parents were mainly motivated by education and socialization goals for their children; they participated to a limited extent in the program; they apparently lacked initiative to involve themselves in it; and they considered the program "child-centered" rather than "family-centered."
Duration: January-February 1966.
Investigator(s): John R. Belton, Ed.D., Supervisor of Educational Research, and Sidney Goldberg, M.S., School Social Worker, Milwaukee Public Schools, 2525 W. Van Beck, Milwaukee, Wis. 53211.
Publication: Copies of summary report are available from authors.

21-QE-7 EVALUATION PROGRAM: READINESS CENTER DEMONSTRATION PROJECT

Purpose: To evaluate the effectiveness of a pre-school program for children from culturally different home environments.
Subjects: Pre-school children from lower socio-economic homes whose older siblings have had a history of school failure.
Methods: In 1966 and 1967 35 children were involved in two kindergarten programs. A control group was observed. Prior to, during, and after involvement, all children are assessed medically, psychologically, and educationally. School will be discontinued in 1968, but the children will be followed longitudinally for 10 years.
Findings: Range of Binet scores in experimental group increased following treatment. Although mean scores were significantly highest (.01) for the control group during 1966, differences were not present when same children were re-tested in 1967.
Duration: 1966-1968.
Investigator(s): Jay K. Bishop, Associate Professor of Educational Psychology, and Beverly R. Cutler, Associate Professor of Education, University of Alberta, Edmonton, Alberta, Canada. (Reported by Neil M. Purvis, Acting Head, Department of Elementary Education, University of Alberta.)
Cooperating group(s): National Council of Jewish Women; Junior League of Edmonton; Edmonton Welfare Council.
Publication: *Interim Evaluation of the Readiness Center of Edmonton*, University of Edmonton, September 1967; report by Early Childhood Education Council of Alberta Teachers Association, Fall 1967.

21-QE-8 AN EVALUATION OF DIFFERENCES AMONG DIFFERENT CLASSES OF HEAD START PARTICIPANTS

Purpose: To study possible differences among three different groups of parents of children eligible for Head Start programs.
Subjects: 52 families in which the children were enrolled in Head Start through the parents' own initiative; 35 families which enrolled the child in Head Start, but only after they had been contacted personally by the study staff; 29 families who failed to enroll their children in Head Start, even after the personal contact with study staff; and 30 middle class families who had children of Head Start age or younger who had no previous school experience.
Methods: Standard measures of intelligence and school readiness. Original questionnaire measuring parental aspirations, parental awareness of the community, nature of the children's toys, and quality of living accommodations.
Findings: Children of parents who are self-referred to Head Start perform significantly better than do other disadvantaged groups on tests of verbal skills but not as well as middle class children who are a year younger. Parents in this self-referred group are more aware of facilities in the community, more apt to have books and more living space at home than other disadvantaged groups. Parents who were sought after in this study but whose children did not participate in Head Start scored lowest in these areas and were least likely to have the same aspirations for their children as middle class parents. Differences between the self-referred group and the sought after parents whose children did participate were vastly reduced by the end of program.
Duration: January-August 1966.
Investigator(s): Douglas Holmes, Ph.D., Director of Research, and Monica Bychowski Holmes, Ph.D., Project Director, Research Department, Associated YM-YWHA's of Greater New York, 33 W. 60th St., New York, N. Y. 10023.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publication: Mimeographed final report available upon request from the Research Department of the Associated YM-YWHA's of Greater New York.

21-QG-1 SUMMER WORK-STUDY PROGRAM FOR HIGH SCHOOL STUDENTS

Purpose: To investigate factors associated with selection of mental health careers, and to determine whether summer placements in mental health agencies facilitate entrance of individuals into mental health careers.
Subjects: 240 high school juniors and seniors.
Methods: Half the students are provided with an integrated 10-week academic work experience in mental health for five summers while remaining 120 students are not involved in mental health work. Both groups are tested with various attitude, value, and personality measures and are followed up for seven years into the selection of a career.
Duration: June 1966-September 1972.
Investigator(s): Richard A. Pasewark, Ph.D., and Hugh B. McFadden, Ph.D., Professors of Psychology, University of Wyoming, Laramie 82070; and B. J. Fitzgerald, Ph.D., Director of Psychological Services, Wyoming State Hospital, Lander, Wyo. 82520.
Cooperating group(s): Wyoming State Training School; Veterans Administration Hospital (Sheridan); National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Yearly reports to National Institute of Mental Health.

21-QG-2 THE BRIDGEPORT VOCATIONAL REHABILITATION AND COOPERATIVE EDUCATION DEMONSTRATION PROJECT

Purpose: To determine by professional research methods the most efficacious ways of providing vocational rehabilitation service for all physically, mentally, and emotionally handicapped youth, ages 14 to 21, through a cooperative arrangement between the schools of Bridgeport, local community agencies and organizations, and the Bureau of Vocational Rehabilitation.
Subjects: 300 handicapped high school students.
Methods: Using State Rehabilitation Counselors, a sequence of service procedures has been established in three high schools consisting of referral and identification, diagnosis and treatment, training and evaluation, and job placement and follow-up. Varied approaches are used and explored at each high school using control groups so that the most effective methods will be identified.
Findings: A program of skill training and treatment has been implemented for more than 400 students. The role of the rehabilitation counselor has been defined, and the counselor has received excellent reception and cooperation from the school system.
Duration: July 1965-June 1970.
Investigator(s): Paul A. Lane, Ph.D., Professor of Psychology, and Louise Soares, Ph.D., University of Bridgeport, Bridgeport, Conn. 06604.
Cooperating group(s): Bridgeport Board of Education; Vocational Rehabilitation Administration, U. S. Department of Health, Education, and Welfare.
Publication: Two publications in preparation.

21-QG-3 EVALUATION OF A WORK-STUDY PROGRAM

Purpose: To determine what effect, if any, long-term systematic work experience had on the early vocational history of young adult males from low income families.
Subjects: 69 male students from four New York City high schools; 48 took part in the Municipal Cooperative Education Program in 1962-1963, and 21 are former controls. Under provisions of the program, students worked at full time entry jobs in City departments alternate weeks and attended special curriculum classes full-time every other week for two years.
Methods: Respondents were located, group interviews held, and a planning questionnaire administered. Depth interviews were held with 16 more verbal and more aware respondents selected from among group interviewed. Tapes of individual interviews and planning questionnaires completed during the program were also obtained. Criteria used for evaluating benefits, hindrances, or ineffectiveness of the program were: ability to hold and progress in jobs, suitability and satisfaction with occupation and life-style, knowledge of job-related information and use in self-management, recognition of goals, qualifications, and interests, and plans for and attainment of further education and training.
Findings: (1) Program participants benefitted from exposure to work environment, work routine, and non-teacher adult contact, role models, and advice, especially in most office and some hospital jobs; (2) program participants benefitted from regular earnings as symbols of independence rather than for self-support; (3) cooperative students seemed to exhibit less floundering than did controls, yet few have acquired marketable skills; (4) cooperative students lacked, and felt the need for, counseling to a greater extent than did controls; (5) cooperative students suffered from isolation in the special all-cooperative classes they attended and from reduction in number of courses offered them, and limited exposure to academic and commercial courses limited aspirations and activities; and (6) program made no provision for change in work assignment if student was not satisfied, and students could not leave special classes in mid-year.

Duration: February 1966-March 1967.
Investigator(s): Eva A. Vambery (Ed.D. Candidate), Research Sociologist, Center for Urban Education, 33 W. 42nd St., New York, N. Y. 10036.
Cooperating group(s): Ford Foundation; Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Report filed with Department of Personnel of the City of New York and Center for Urban Education.

21-QG-4 AN EVALUATION STUDY OF THE EFFECTIVENESS OF THE NEIGHBORHOOD YOUTH CORPS

Purpose: To determine whether or not the Neighborhood Youth Corps program significantly improves the economic, social, and educational level of the youths who participate.
Subjects: A 25 percent random sample of Neighborhood Youth Corps participants, ages 16 to 21, matched with a control group who had sought NYC help but who are not in the program.
Methods: The Neighborhood Youth Corps provides employment and an educational program for out-of-school youth. Questionnaires and personal interviews are utilized to evaluate, study, and compare the subjects in three main areas: (1) obtaining and retaining employment, including a study of level of performance, skills acquired and money earned before and after NYC experience; (2) social improvement, including police contacts, conflicts with peers, authorities, and parents, violations of laws, and personal deportment and activities; and (3) educational adjustment or improvement, including behavior, school attendance, subjects taken and completed, and grades received. Data on each youngster in the program will be traced back two years prior to participation in the NYC, and will extend at least two years from the beginning in the program. Data will be analyzed to determine whether or not a significant relationship or difference exists between the two groups.
Duration: June 1965-1968.
Investigator(s): Murray Weisman, Associate Director, The Citizens' Committee on Youth, 909 Plum St., Cincinnati, Ohio. (Reported by NCCD. See Note, p. 73.)
Cooperating group(s): U. S. Office of Economic Opportunity.

21-QG-5 PRE-VOCATIONAL JOB TRAINING

Purpose: To provide pre-vocational job training for boys and girls who are capable of benefitting from such training and in whose home community there is a job vacancy in the particular area of training.
Subjects: Boys and girls, ages 15-1/2 and older.
Methods: Pre-vocational job training is provided in nine areas: clerical services and public contact positions; farm specialty worker; food preparation and related services; furniture repair and upholstery; home care specialist; meat cutting; nurseryman; seamstress; and automobile service. Each course consists of three hours daily vocational instruction and three hours of regular school with daily help in special education classes. A special tutoring program with greater emphasis on reading and spelling is provided for those children below the sixth grade level. Project also includes specialized job counseling at the Youth Development Center and continued counseling, job development, and placement for the youths after they leave the Center.
Duration: January 1965-September 1966.
Investigator(s): James I. Lamb, M.S.W., Youth Development Center, 325 Curry Hill Rd., Canonsburg, Pa. (Reported by NCCD. See Note, p. 73.)

Cooperating group(s): Washington County Board of Education; Pennsylvania Department of Public Welfare; Pennsylvania Department of Public Instruction; Pennsylvania Bureau of Employment Security; Office of Manpower, Automation, and Training, U. S. Department of Labor.

21-QH-1 EVALUATION OF A METHOD OF SCHOOL-TO-HOME TELEPHONE INSTRUCTION OF PHYSICALLY HANDICAPPED, HOMEBOUND ADOLESCENTS

Purpose: To determine whether use of a school-to-home telephone by physically handicapped homebound adolescents will lead to greater academic achievement and intellectual development, greater improvement in social-emotional development, and improvement in teachers' lessons.
Subjects: Physically handicapped, homebound children in Brooklyn, New York, whose student population is representative of that of all large cities.
Methods: Subjects are assigned randomly to one of two groups--experimental or control. Experimental variable consists of school-to-home telephone hook-up which permits discussion and follow-up of a radio broadcast lesson. Data collected by means of questionnaires, interviews, individual tests from students, teachers, parents, and siblings will be analyzed in terms of test scores and ratings by qualified judges.
Duration: November 1965-May 1968.
Investigator(s): Kathleen Lolis, Ph.D., Research Psychologist, Bureau of Educational Research, New York City Board of Education, 110 Livingston St., Brooklyn, N. Y. 11201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Required reports will be submitted to the New York State Department of Education and the U. S. Office of Education. No other publication is definitely planned at this time.

21-QH-2 DEVELOPMENT OF MORE EFFECTIVE TEACHING METHODS FOR CHILDREN WITH MULTIPLE SENSORY IMPAIRMENTS

Purpose: To study methods for teaching children with multiple sensory impairments whose potentials for learning are not tapped by presently available instructional methods.
Subjects: Six sensorily handicapped children.
Methods: Standard and special educational materials are utilized. Methods are based on Piaget techniques and techniques developed at University of Minnesota. Training materials, tests, and interview procedures are carried out.
Duration: 1965-1970.
Investigator(s): Lydia Muller-Willis, Ph.D.; Peter F. Briggs, Ph.D.; Frederic J. Kottke, M.D., Ph.D., Professor and Director; and C. G. Lyle, B.A., Department of Physical Medicine and Rehabilitation, University of Minnesota Medical Center, Minneapolis, Minn. 55455.
Cooperating group(s): Michael Dowling School for Crippled Children; Minneapolis Public Schools.

21-QH-3 A PROGRAM OF INSTRUCTION IN LANGUAGE SKILLS FOR THE HANDICAPPED CHILD: AN EXPLORATORY STUDY

Purpose: To devise a technique to provide a means of communication for children whose response capability is so restricted that they cannot learn to speak or to write; to determine the effect of deficient motor control on visual perceptual abilities.
Subjects: Six-year-old athetoid cerebral palsied child unable to control movement to a large extent, and unable to speak.
Methods: Operant conditioning through use of an enlarged typewriter keyboard. Stimuli were presented either verbally or by pictures, and the response to the correct key was immediately rewarded.
Findings: Results indicated that accurate visual perception can be developed through visual scanning movements of the eyes when other motor responses are severely limited. It would appear that very early training in making scanning visual responses is of extreme importance in the intellectual development of handicapped children.
Duration: Not reported.
Investigator(s): Suzanne D. Hill, Ph.D., Assistant Professor of Psychology, Louisiana State University in New Orleans, Lakefront, New Orleans, La. 70122.
Cooperating group(s): St. Bernard Parish School Board, La.; Cerebral Palsy Research and Educational Foundation; National Science Foundation.
Publication: Submitted to *Child Development*.

SOCIAL SERVICES

21-RA-1 A PILOT STUDY OF FAMILY ADVICE SERVICES

Purpose: To gather information on a national basis of how family advice services are being planned or have already begun to be put into practice by local authority Children's Departments. The second phase of the project will consist of a more detailed and prolonged study of three or four services.
Subjects: About 18 different services in England.
Methods: The Senior Research Officer has been spending several days in each of the above services; in addition, a number of services established by voluntary organizations have also been briefly studied.
Duration: April 1966-June 1969.
Investigator(s): A. Leissner, Esq., M.S.W., Senior Research Officer, National Bureau for Co-operation in Child Care, Adam House, 1 Fitzroy Square, London, W.1., England. (Reported by M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Co-operation in Child Care.)
Cooperating group(s): Children's Departments in selected local authorities; The Home Office.
Publication: Studies in Child Development, Longmans, April 1967; final report will also be published in the same series.

21-RB-1 THE FAMILY AGENT: A NEW CAREER IN HUMAN SERVICE

Purpose: To provide a new source of manpower--college-educated women available on a part-time basis--to give intensive services to multi-problem families in a low income, multi-racial urban neighborhood.
Subjects: 68 college-educated women, and 235 families referred by the Bureau of Public Assistance, the Juvenile Probation Department, or the public schools.
Methods: Under professional supervision, the Family Agents worked with from two to five families to provide or locate services in the areas of home management, budgeting, health and mental health, education, employment, and community responsibilities. Evaluation includes a study of life styles of the poor; an instrument to measure family movement; determination of the availability of this source of manpower; selection, training, and intervention techniques; and an evaluation of outcome of program.
Findings: There is a wide availability of this source of manpower, which, with adequate selection and training, can work with low income families who show widely differing life styles. Over an extended period, this type of staff can be effective in instigating family change in certain problem areas.
Duration: March 1964-October 1966. (Evaluation completed, but program continuing).
Investigator(s): Irving Lazar, Ph.D., Project Director, and Joyce B. Lazar, M.A., Training Director, Neumeyer Foundation, 405 N. Bedford Dr., Beverly Hills 90210; and Harry Grace, Ph.D., Research Director, Department of Sociology, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publication: Results of the program, including training manual and evaluation of program, available from the Neumeyer Foundation. (Two volumes--$3.67 per volume).

21-RB-2 VOLUNTEERS TO PREVENT EMOTIONAL PROBLEMS IN CHILDREN

Purpose: To determine whether early assignment of college volunteer "big brothers and sisters" will help to prevent emotional disturbances in elementary school pupils; to establish at what age the children will benefit most from this experience; to observe the effect on participating college students.
Subjects: 20 third grade and 20 first grade "slow" children; 40 volunteer freshman college students.
Methods: College students will provide fun and curriculum enrichment for children one afternoon a week for a period of three years. Comparison will be made with children who entered school at the same time as subjects and had no service. Evaluation will include use of achievement and psychometric tests, sociometric diagrams, annual evaluation conferences, and social research procedures.
Duration: February 1966-January 1970.
Investigator(s): Ruth Thomson, M.S., Executive Director; Hans R. Huessy, M.D., Psychiatrist; John Miller, M.A., Clinical Psychologist; and Ann Kimberly, M.S., Psychiatric Social Worker, Counseling Service of Addison County, Municipal Bldg., Middlebury, Vt. 05753.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-RB-3 METROPOLITAN CRITICAL AREAS PROJECT

Purpose: To study new ways of organizing and developing girls' group experiences, program activities, and volunteer leadership to make a significant contribution to the social development of girls.
Subjects: Girls, ages seven through high school, including those who are mentally retarded, living in three metropolitan target areas in Boston, Mass., Detroit, Mich., and Washington, D. C.
Methods: Maximum use of program activities, innovations, and research implementation.
Duration: Not reported.
Investigator(s): Helen Rowe, Associate Director and Project Director, and Ronald Lippitt, Ph.D., Senior Research Consultant, Camp Fire Girls, Inc., 65 Worth St., New York, N. Y. 10013.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-RB-4 INITIAL REACTIONS TO THE FIRST COMMUNICATION (A LETTER) FROM A CHILD PROTECTIVE AGENCY

Purpose: To document the reactions parents or child caretakers have to a letter sent by The Massachusetts Society for the Prevention of Cruelty to Children, a child protective agency, in which the agency expresses its interest in the referred family situation and in which an appointment date is set. It has long been a question as to whether a letter or an unscheduled personal contact is the preferable method to initiate contact.
Subjects: 50 families referred to three District offices of the Massachusetts Society for the Prevention of Cruelty to Children.
Methods: A standard letter is sent to each family referred except where there is a report of abuse, crisis, or abnormality. The caseworker interviews each family following a structured interview schedule prior

to formally exploring the family situation. The research schedule elicits information on the emotional and behavioral reactions at the time the letter was received and data regarding some factors which are seen as having a relationship to the reactions.
Duration: November 1965-December 1966.
Investigator(s): Morton I. Cohen, Research Director, Massachusetts Society for the Prevention of Cruelty to Children, 43 Mt. Vernon St., Boston, Mass.
Publication: Publication planned.

21-RB-5 COMPREHENSIVE YOUTH PROGRAM OF THE EAST CENTRAL CITIZENS ORGANIZATION

Purpose: To enable teenagers, by voice and action, to bridge the fear-hate gap with adults, business, agencies, and institutions.
Methods: Youth will be the largest group of workers. They will have a large responsibility in working out and running activities such as employment aid and training, the cultural arts, social and neighborhood action, new ways of education, and recreation. Youth will learn to develop programs and use already existing agencies. They will work and participate in the youth program through a youth council and the East Central Citizens Organization Executive Council, which gives any person above 16 years of age voice, vote, and position. A program director and an assistant will work with the youth and help train two neighborhood people who have talent-interest-concern for teenagers and will help youth workers in aiding their peers.
Duration: Not reported.
Investigator(s): Leopold W. Bernhard, Project Director; Thomas Green, Program Director; and Clifford Tyree, Chairman, Executive Council, East Central Citizens Organization, 22nd and McAllister, Columbus, Ohio.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-RB-6 CREATIVE ARTS FOR ALIENATED YOUTH

Purpose: To attempt to deflect trouble-prone and deviant youth from potentially self- and socially destructive activities through a program of creative arts which will enable them to develop their individual potentialities through productive expression.
Subjects: Youths indigenous to a poverty community and alienated youth, presently members of the "subculture of the uncommitted."
Methods: Program consists of a theatre program, a poetry and writing workshop, and a film-making program. Each of these three components is designed to develop serious art productions beginning with creative improvisational techniques through disciplined art expression. Artists-producers directing each program will represent role models with whom youth can readily identify. The youth population and responsiveness of the program to the youth will be assessed and evaluated.
Duration: Not reported.
Investigator(s): Rev. J. C. Michael Allen, Project Director; Harry Silverstein, Co-Director; and Bernard Rosenberg, Research Associate, Center for New York City Affairs, New School for Social Research, 70 Fifth Ave., New York, N. Y. 10011.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Welfare Administration, U. S. Department of Health, Education, and Welfare.

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21-RC-1 A DEMONSTRATION OF RE-ORIENTATION OF ILLEGITIMATELY PREGNANT TEENAGE GIRLS LIVING IN RURAL AREAS

Purpose: To help the illegitimately pregnant teenage girl achieve a future pattern of behavior that will meet her needs constructively; to keep the illegitimately pregnant girl in her own community where possible, and to change the community climate in terms of services to the unmarried mother.
Methods: A multi-faceted program of social, emotional, educational, and medical treatment has been established to "re-orient" girls. Period before the birth is used to reduce immediate life pressures, to provide a period of nurturing, and to plan educational, medical, and social services. After delivery, girls are helped to carry out individual plans for the future which will include the appropriate services.
Duration: Not reported-January 1969.
Investigator(s): Edith Zober, Research Director, Iowa Children's Home Society, 1101 Walnut St., Des Moines, Iowa; and Merlin Taber, Ph.D., Associate Professor, School of Social Work, University of Illinois, Urbana, Ill.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-RE-1 THE FOSTER FATHER ROLE

Purpose: To discover functional differences between natural and foster fatherhood.
Subjects: 40-45 foster families caring for a normal boy in elementary school.
Methods: Interviewing of families and caseworkers.
Duration: November 1966-December 1967.
Investigator(s): Leo Davids (Ph.D. Candidate), Department of Sociology, Hunter College, New York, N. Y.

21-RE-2 SPECIALIZED FOSTER HOME CARE FOR DEPRIVED MENTALLY RETARDED CHILDREN

Purpose: To determine the feasibility and value of foster home care for a select group of mentally retarded children; to demonstrate possible prevention and treatment of functional mental retardation through proper foster family care; and to identify those ingredients in specialized foster care that can have application for other groups of children with special needs so that this project can serve as a model for similar programs elsewhere.
Subjects: 30 children, ages 4 to 10-1/2, half of whom have a diagnosis of functional retardation due to adverse environmental experiences or parental inadequacies, and half a diagnosis of retardation due to an organic etiology; control group of 30 institutionalized mentally retarded children selected on same basis.
Methods: Children are placed in foster care and are periodically evaluated and compared with control group.
Duration: 1964-January 1967.
Investigator(s): Marjorie Wilson, Project Director, and Robert Fishman, Research Director, Kentucky Department of Child Welfare, New Capitol Annex, Frankfort, Ky.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-RK-1 THE RESPONSE OF YOUNG PARENTS AND EXPECTANT PARENTS OF LOW SOCIO-ECONOMIC STATUS TO A GROUP FAMILY LIFE EDUCATION PROGRAM

Purpose: To ascertain the reaction of participants in a family life discussion group; to determine the reasons for attrition of the group, and the reasons why eligible non-participants are not interested in joining the group.
Subjects: Couples in which the wife is 20 years of age or younger at the start of the program and a patient at one of two maternity clinics.
Methods: Structured interviews, guided by schedules which contain both pre-coded and open-ended questions.
Duration: June 1966-tentatively 1971.
Investigator(s): Elizabeth L. Lyman, Ph.D., Research Associate, and Janet S. Brown, M.S.W., Staff Associate, Community Service Society, 105 East 22nd St., New York, N. Y. 10010.
Cooperating group(s): Lincoln Hospital, St. Francis Hospital, Mill Brook Community Center of East Side House Settlement, Bronx, New York.
Publication: Probably a mimeographed report will be available for a modest fee.

21-RL-1 PROLONGED STAY OF CHILDREN IN TEMPORARY CARE SHELTERS

Purpose: To identify and describe factors which contributed to lengthy stays in the temporary care shelters of the New York City Department of Welfare.
Subjects: 370 children who entered the temporary care shelters during first six months of 1964 and remained for more than one month.
Methods: Information regarding children's characteristics was transcribed from case records kept at the temporary care shelters; information regarding allocation process was transcribed from cards kept by Allocation Section of Bureau of Child Welfare, New York City Department of Welfare.
Findings: The report contains four sections: (1) the time involved in accomplishing each step of the placement procedure; (2) religion and race-ethnicity of the children whose cases were involved in the placement process; (3) a comparison of children who were rejected for placement by one or more agencies with those who were accepted upon initial consideration by an agency; and (4) characteristics of children who ultimately entered long-term foster care as compared with those of children who returned to their own (or similar) homes after both had spent more than one month in the shelters.
Duration: March-September 1966.
Investigator(s): Lawrence Podell, Ph.D., Assistant to the Commissioner for Research, and Ted Nelson, Ph.D., Principal Research Scientist, Office of Social Research, New York City Department of Welfare, 271 Church St., New York, N. Y. 10013.
Cooperating group(s): Bureau of Child Welfare, New York City Department of Welfare.
Publication: Information will be available from the Office of Social Research, New York City Department of Welfare, 271 Church St., New York, N. Y. 10013.

21-RL-2 NATIONAL STUDY OF CHILDREN IN CARE

Purpose: To study, on a national scale, the effects of young children having been in care, and to relate these to the mother's personal and social history, as well as to the child's birth history.
Subjects: All those children from the National Child Development Study (1958 cohort) who have been in care for shorter or longer periods during the first seven years of their lives.
Methods: A detailed and comprehensive inquiry will be made into the reasons for coming into care, type of substitute care given, whether and why changes in arrangements had to be made, as well as duration and frequency of separation from their own families; also, comparisons will be made between the emotional, social, educational, and physical development of those who have been in care and those who continued to live at home.
Duration: October 1966-April 1968.
Investigator(s): E. Pugh, B.A., Senior Research Officer, National Bureau for Co-operation in Child Care, Adam House, 1 Fitzroy Square, London, W.1, England. (Reported by M. L. Kellmer Pringle, Ph.D., Director, National Bureau for Co-operation in Child Care.)
Cooperating group(s): Children's Departments in England, Scotland, and Wales; Nuffield Foundation.
Publication: Probably in Studies in Child Development, National Bureau for Co-operation in Child Care.

HEALTH SERVICES

21-SA-1 STUDY OF RELATIONSHIP BETWEEN HEALTH INFORMATION, ATTITUDES, AND ACTION

Purpose: To study (1) relationships between information about and attitudes towards disease among teenagers and preventive health action taken; (2) ways in which changes in attitudes precipitate corresponding action; and (3) other factors affecting both attitudes and the probability of taking action.
Subjects: Approximately 250 boys and girls, ages 14 to 17, at various summer camps in Virginia and Maryland.
Methods: In a field experiment, attitudes towards diabetes among adolescents and time delay in the opportunity for health action as well as certain other variables are systematically varied under controlled conditions. The criterion is volunteering for a screening test for diabetes.
Duration: April-December 1966.
Investigator(s): Godfrey M. Hochbaum, Ph.D., Chief, and Bonnie Zwicker, Research Psychologist, Behavioral Science Section, Research Grants Branch, Division of Community Health Services; and Fred Heinzelmann, Ph.D., Research Psychologist, Heart Disease Branch, Division of Chronic Diseases, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.
Publication: Journal article planned in 1967.

21-SA-2 ALLERGIES IN CHILDREN AND ADOLESCENTS: CONTINUED STUDY

Purpose: To follow up 928 12th grade students who were randomly selected from three socio-economic levels and surveyed for allergies as 8th graders (1963) in the Denver public schools; to study the progress of these allergies from early to mid-adolescence as well as their effect on school attendance and disability; to investigate adequacy of medical care obtained for these conditions and its variation among the different socio-economic levels.
Methods: Questionnaire will be administered. An intensive medical and laboratory study of a smaller 150 random sample from another 12th grade class will be used for comparison. In addition, 1,000 pre-school children in Head Start programs will be seen for allergy history and nasal cytology studies to investigate the finding from the original survey that much less allergy was reported from the lower socio-economic group. These children had seen fewer medical specialists for these conditions and had less continuing care than middle and upper class children. It is hypothesized that this difference in reporting is due to inferior diagnostic services and care available to this group as well as failure of this group to seek care as readily for these chronic conditions.
Duration: Not reported.
Investigator(s): Samuel Johnson, M.D., Director, Division of Public Health and Preventive Medicine, and Geraldine Freeman, M.D., Pediatric Allergist, Denver Department of Health and Hospitals, West 6th Ave. and Cherokee St., Denver, Colo. 80204.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SA-3 DETERMINATION OF THE PREVALENCE AND SPECIAL NEEDS OF CHILDREN WITH BRONCHIAL ASTHMA OR ATOPIC DERMATITIS

Purpose: To determine (1) the prevalence and care needs of children with atopic disorders in the State of Maryland by determining the prevalence and characteristics of children with bronchial asthma in a sample population of elementary school age children, and (2) the prevalence of children with atopic dermatitis in a sample population of one-year-old children.
Subjects: A stratified random sample of children drawn from either pupil rosters or birth certificates.
Methods: Mothers of children were interviewed in their home and data obtained concerning the medical history, physical and social environment, and family structure of each child. Physical examinations and skin tests were conducted on all cases and two controls matched for age, sex, race, and residential history. Medical reports were obtained from clinics or personal physicians reported by the mother to be the child's regular source of medical care.
Duration: Not reported.
Investigator(s): Marie Britt Rhyne, M.D., Assistant Professor of Pediatrics; David Mellits, Sc.D., Assistant Professor of Biostatistics and Assistant in Pediatrics; and Anne Clark Rodman, M.S., Assistant in Biostatistics, Johns Hopkins University School of Medicine, Baltimore, Md. 21205.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.
Publication: Monograph will focus upon programming for delivery of comprehensive health care to atopic allergic children.

21-SB-1 A HEARING CONSERVATION PROGRAM FOR CHILDREN

Purpose: To develop and maintain a statewide hearing conservation program for school students of Kansas; to evaluate the effectiveness of a hearing conservation program using a mobile testing unit.
Subjects: 200,000 students.
Methods: A mobile testing unit with identification audiometry is used to locate children with hearing loss who need medical or educational assistance in treatment and rehabilitation. Major emphasis is placed on prevention, casefinding, and diagnosis. The private physician in the community receives initial referrals. Project attempts to cultivate community interest in hearing problems and their conservation, and to motivate the development of similar programs in the schools of the State.
Duration: Not reported.
Investigator(s): Patricia T. Schloesser, M.D., and Evalyn S. Gendel, M.D., Kansas State Department of Health, State Office Building, Topeka, Kan.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

21-SB-2 EVALUATION OF A COMMUNITY-WIDE PROGRAM IN FIRST GRADE

Purpose: To evaluate effectiveness of a community-wide school program of prevention and early treatment for first grade children of a lower socioeconomic urban Negro neighborhood in reducing prevalence of maladaptation and/or mental illness during first school years and later in school careers as measured at end of third grade.
Subjects: 2,017 first graders in 57 classrooms in Woodlawn.

Methods: Weekly classroom group meetings and school staff meetings are held in experimental schools. Outcome for children in both experimental and control schools is assessed at end of first and third grades, in terms of classroom adaptation, psychiatric status, and school performance. Institutional outcome is being assessed for both experimental and control schools in terms of differences in teachers' views of classroom maladaptation with subsequent cohorts of first graders, and teachers' comfort in the school. In addition, children in program schools who improve will be compared with those who do not, in terms of initial classroom maladaptation ratings, psychiatric status, ability test scores, and characteristics of the children and their families, obtained by family interviews.
Duration: January 1967-December 1970.
Investigator(s): Sheldon K. Schiff, M.D., and Sheppard G. Kellam, M.D., Assistant Professors of Psychiatry, University of Illinois College of Medicine, and Co-Directors, Woodlawn Mental Health Center, 841 E. 63rd St., Chicago, Ill. 60637.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

21-SC-1 INCREMENTAL ORAL HEALTH SERVICES PROVIDED BY DENTAL STUDENTS

Purpose: To determine practicality of using fourth year dental students during summer vacation as a source of dental manpower; to determine any attitude shifts concerning dentistry in children treated by dental students in the community; and to determine the attitude of health and community leaders about the program.
Subjects: Elementary school children.
Methods: Operating in five mobile clinics, each equipped with two dental chairs, fourth year students will provide complete dental care for elementary school children in Wolfe County, Kentucky. Children in lower grades will be treated first. Program will include education in prevention of dental disease for teachers, children, and parents. Clinical operation will be supervised by faculty members from the University of Kentucky College of Dentistry. Per unit and per patient cost of the project will be determined at the end of each operating year. A written attitude scale will be used to assess the attitude of fourth, fifth, and sixth grade students concerning dentistry at the beginning of the project, and again after three and five years of operation. Personal interviews will be used to assess the attitude of community leaders and health personnel about the project at end of fifth year.
Duration: November 1966-October 1971.
Investigator(s): Wesley O. Young, D.M.D., M.P.H., Professor and Chairman; Arlen G. Podshadley, D.D.S., M.S.D., Assistant Professor; and Edith R. Sanders, R.D.H., M.P.H., Instructor, Department of Community Dentistry, College of Dentistry, University of Kentucky, Lexington, Ky. 40506.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Comprehensive booklet to be published by Department of Community Dentistry.

21-SC-2 THE DENTAL STATUS OF MENTALLY RETARDED CHILDREN

Purpose: To identify the blocks inherent within the dental profession which interfere with rendering care to mentally retarded children; to determine what dental problems exist in the mentally retarded children

of Georgia, whether their dental problems differ from those of normal children, and if so, how; to identify the blocks which mentally retarded children or their parents experience in obtaining dental care for these children.
Subjects: A 10 percent sample of the practicing dentists in Georgia; a 50 percent random sample of severely retarded and trainable children in the state institution for retarded children, a 16 percent sample of the 7,000 educable mentally retarded children enrolled in the "special" classes in the public school system in Georgia, selected at random by classroom, and a randomly selected sample from among the 70 day care schools sponsored by units of the Georgia Association for Retarded Children, including a "total" population of 648 trainable children; parents of all examined non-institutionalized retarded children.
Methods: Questionnaires were employed in the attitudinal or behavioral aspects of the study. They were distributed through teachers of those classrooms selected for study and were gathered by the teachers and coordinators of special education for the particular school systems. Telephone and personal interviews were conducted with dentists. In gathering dental disease data (DMF, OHI, RPI rates), examinations which had been previously standardized and calibrated were conducted by dentists in public health.
Findings: Dentists felt a need for special training and facilities if they were to provide care for retarded children. Many dentists did not know where to refer such children for adequate dental care. Mentally retarded children experienced less dental caries attack than did their "normal" counterparts, but they have more severe gingival disease and less evidence of reparative dental care. Their high prevalence of periodontal deviations appears to parallel a strikingly apparent inadequacy in oral hygiene. Most parents recognized the importance of dental care. Parents of more severely retarded children utilize dentists more for their children than do parents of children who are not as retarded. The private dentist is the chief resource used by parents for the provision of dental care to their retarded children. For those retarded children who did not have dental care in the 18 months immediately prior to the survey, the chief apparent reason was that the parent did not believe the child needed care. The next reason was cost.
Duration: August 1965-June 1966.
Investigator(s): John E. Butts, D.M.D., M.P.H., Resident in Dental Public Health, Georgia Department of Public Health, 47 Trinity Ave. S.W., Atlanta, Ga. 30303. (Reported by Sidney L. Miller, D.D.S., M.P.H., Director of Special Dental Programs, Georgia Department of Public Health.)
Cooperating group(s): Georgia Association for Retarded Children; Georgia Department of Education; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publication: Submitted in sections to Journal of Public Health Dentistry.

21-SD-1 THE HEALTH VISITOR AS AN ADJUNCT WITH URBAN MATERNAL AND CHILD CARE SERVICES

Purpose: To recruit a new category of paramedical personnel, the health visitor, from members of disadvantaged groups; to improve utilization by socially disadvantaged groups of maternal and child care programs.
Methods: Health visitors will receive a six-month period of training in health and will then function in four separate settings: a housing project, a public school, a local union shop, and a small neighborhood, encouraging participation in official programs of aid. There will be a

simultaneous evaluation of training procedure, integration into the different communities, activities of health workers, their ability to relate to local community leaders, their job satisfactions, the response of official agencies, impact on local residents, and changes in utilization rates, and vital statistics when appropriate.
Duration: Not reported.
Investigator(s): Daniel Rosenblatt, Ph.D., Assistant Professor, Department of Environmental Medicine and Community Health, and Melvin Cohen, Instructor and Research Associate in Social Psychology, Department of Psychiatry, Downstate Medical Center, State University of New York, 450 Clarkson Ave., Brooklyn, N. Y. 11203.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SD-2 PROGRAMMING FOR SOCIAL RESEARCH IN MATERNAL AND CHILD HEALTH

Purpose: To learn more about methods for effective short-term intervention in family crises associated with the developmental process or hazardous situational factors.
Subjects: Chronically ill and handicapped children experiencing an emergency flare-up or a breakdown in management of the disability which requires hospitalization; families of children with birth defects, prematures, pregnant mothers experiencing psychosocial stress, and families experiencing special problems around school entry.
Methods: The investigation will focus on the process of crisis, methods of intervention, and evaluation of the effectiveness of intervention.
Duration: Not reported.
Investigator(s): M. Harry Jennison, M.D., Medical Director, The Stanford Children's Convalescent Hospital; Martin I. Heinstein, Ph.D., Project Director, and Dorothy Ann Waring, M.S.W., Senior Research Assistant, Division of Clinical Social Work, Stanford University School of Medicine, 300 Pasteur Dr., Palo Alto, Calif.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SD-3 NATIONAL STUDY OF MATERNITY CARE

Purpose: To study the present status of obstetrical practice in the United States; to review maternal and child health services in health departments, including the quality of maternity and newborn care in hospitals and the quantity and quality of prenatal care, with special emphasis on patient motivation factors; to develop the obstetric education and professional personnel training phase of the overall study; to evaluate all facets of maternity care in order to formulate future policies and programs.
Investigator(s): Donald B. Berg, American College of Obstetricians and Gynecologists, 79 West Monroe St., Chicago, Ill. 60603.
Cooperating group(s): American Public Health Association; American Medical Association; American Academy of Pediatrics; American Academy of General Practitioners; American Hospital Association; National Institute of Neurological Diseases and Blindness, and National Institute of Child Health and Human Development, Public Health Service, and Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SD-4 DISCONTINUITY OF CARE IN A CRIPPLED CHILDREN'S PROGRAM

Purpose: To determine the non-medical factors influencing receipt of services by children in a state welfare-medical program for the handicapped.
Subjects: A panel of children and their mothers applying to the Division of Services for Handicapped Children, Michigan Department of Public Health.
Methods: The inquiry is directed first to child's mother, and secondly to agency administering the program. The study is primarily sociological, sociopsychological, and economic. Dependent variables include degree of utilization of clinic services and whether parents re-apply after a year of services; independent variables include severity of handicap, expectation of benefits from treatment, socio-economic status, mother's alienation from society and from her family, and mother's attitude toward work, welfare, and dependence, as well as her reaction to the agency's interview concerning her economic eligibility.
Duration: Not reported.
Investigator(s): Donald C. Smith, M.D., Professor; Harold Decker, M.D., Assistant Professor; Richard A. Bogg, and Edward A. Duffy, Research Associates, Maternal and Child Health, Department of Health Development, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SD-5 A SOCIOLOGIC STUDY OF INDIGENT PRIMIGRAVID PREGNANCY

Purpose: To test the hypotheses that: (1) different patterns of behavioral and attitudinal adaptation to pregnancy exist among indigent primigravid patients, and that these differences exist not only between Negro and white patients, but within these two racial groups as well; (2) these different patterns of behavioral and attitudinal adaptation are associated with cultural and structural characteristics of the social environment; (3) the association between characteristics of the social environment and adaptation to pregnancy is mediated through intervening social psychological variables such as alienation, achievement motives, authoritarianism, and anxiety; and (4) these different patterns of behavioral and attitudinal adaptation are related to pregnancy outcome, i.e., rates of prematurity, perinatal mortality, and other forms of reproductive wastage.
Subjects: 1,000 indigent primigravid patients at Grady Hospital, Atlanta, Georgia.
Methods: Will collect data relating to: (1) cultural and structural characteristics of the social environment (age, race, education, economic factors, etc.); (2) intervening social psychological variables (alienation, normlessness, etc.); (3) behavior and attitudes in pregnancy; and (4) pregnancy outcome. Standard statistical techniques will be used in studying the relationships between variables and drawing inferences to the study population.
Duration: Not reported.
Investigator(s): William L. Graves, Department of Obstetrics and Gynecology, School of Medicine, Emory University, 80 Butler St., S.E., Atlanta, Ga. 30303.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SE-1 THE EFFECT OF PREGNANCY SPACING ON BIRTH OUTCOME

Purpose: To explore the effect of pregnancy spacing on birth outcome.
Methods: Computer matching of consecutive birth events to the same woman from vital statistics in three states. Multivariate analysis will allow measurement and simultaneous control of the interrelationships to both pregnancy spacing and birth outcome of race, age, parity, and socio-economic status.
Duration: Not reported.
Investigator(s): J. Richard Udry, Ph.D., Associate Professor of Sociology, and Associate Professor; Naomi M. Morris, M.D., M.P.H., Assistant Professor; and Sidney S. Chipman, M.D., M.P.H., Professor, Department of Maternal and Child Health, School of Public Health, University of North Carolina, Chapel Hill, N. C.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SE-2 OPERATIONAL EVALUATION OF FAMILY PLANNING SERVICES

Purpose: To develop research strategies for evaluating family planning services; eventually, to survey other clinic service activities and staffing patterns; to conduct study of various means of patient follow-up and casefinding; and to construct new demographic measures of program impact.
Methods: Planned Parenthood centers, voluntary and tax-supported hospitals, and health departments will be included.
Duration: August 1966-July 1967.
Investigator(s): Steven Polgar, Ph.D., Director of Research, Planned Parenthood Federation of America, 515 Madison Ave., New York, N. Y. 10022.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SF-1 EVALUATION OF THE INTERDISCIPLINARY TEAM FOR PROFESSIONAL TRAINING AND FOR PROVISION OF SERVICES TO HANDICAPPED CHILDREN

Purpose: To investigate effectiveness of the interdisciplinary team approach in providing patient services and professional training in clinics serving handicapped children.
Methods: There will be accumulation and comparison of empirical data relevant to diagnostic formulations, and programmatic recommendations and prognostic judgments made by individual professionals functioning alone and by interdisciplinary teams of varying size and disciplinary composition. Data relative to the influence of professional training of varying lengths of time within an interdisciplinary-oriented clinic setting will also be collected and analyzed.
Duration: Not reported.
Investigator(s): Robert W. Deisher, M.D., Director, Clinic for Child Study, School of Medicine, University of Washington, Seattle, Wash.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SF-2 CARE-BY-PARENT UNIT FOR HOSPITALIZATION OF CHILDREN

Purpose: To determine the most effective and efficient manner of operating a Care-by-Parent Pediatric Unit for the hospitalization of non-acutely ill children in Kentucky.
Subjects: 12 patients and one parent each.
Methods: Child is cared for by parent under medical supervision from Pediatric Outpatient staff. All diagnostic and special treatment facilities of the Medical Center are available with minimal number of hospital attendants. Staff will utilize best methods of teaching parents to handle specific medical and child care problems, especially in chronically ill patients. Costs and charges will be defined, and necessary approaches will be found to adapt the unit to needs and peculiarities of Kentucky people, especially those from Appalachia. Effect of parent care will be under constant evaluation, as will the impact of the unit on the staffing of the conventional pediatric ward.
Duration: Not reported-March 1967.
Investigator(s): Warren E. Wheeler, M.D., Professor and Chairman, and Vernon L. James, M.D., Assistant Professor, Department of Pediatrics, Medical Center, University of Kentucky, Lexington, Ky. 40506.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SF-3 FOLLOW-UP CARE AND A PEDIATRIC EMERGENCY ROOM

Purpose: To identify significant variables in the use of pediatric emergency room services, particularly the use of follow-up care, when indicated, in respect to household characteristics, pattern of usage of health facilities, and attitude toward existing facilities.
Subjects: Population selected from pediatric emergency room patients with recent diagnosis of acute infectious disease.
Methods: Children are divided into those attending and those not attending prescribed follow-up care. Field visits are made to homes of both groups to examine health status of index child and characteristics of household members, to identify sources of medical and social services used, and to define attitudes toward and reasons for use of particular health facilities.
Duration: June-August 1966.
Investigator(s): Jonas N. Muller, M.D., Professor and Head, and Ruth M. Heifetz, M.D., Instructor, Department of Preventive Medicine, New York Medical College, Fifth Ave. at 106th St., New York, N. Y. 10029.
Cooperating group(s): Health Research Training Program, New York City Department of Health.

21-SF-4 EFFECTIVE PATIENT CARE IN THE PEDIATRIC AMBULATORY SETTING

Purpose: To develop methods of improving medical "effectiveness" in pediatric care within a comprehensive outpatient department, with the main effort directed toward the "ordinary" patient and his family.
Subjects: A multi-disciplinary research team including pediatricians, public health nurses, a social worker, and consultants from the social sciences, and the University nursing school and computer center.
Methods: Will develop a co-professional doctor-nurse relationship that will attempt to assess problems of management simultaneously with the medical investigation. By anticipating problems that could interfere with care and by incorporating this information into initial planning and

subsequent follow-up, it is expected that a detectable improvement in medical "effectiveness" will be demonstrated. New methods will also be studied for evaluation of medical effectiveness, distribution of professional responsibility, and organization of ambulatory services. The first year of the three-year program will include development of study methods and experience in the proposed approach followed by a pilot study; the second and third years will be a full-scale study, applying the devised methods to a broad area of general pediatric care.
Duration: Not reported.
Investigator(s): Donald Fink, M.D., Assistant Professor of Pediatrics and Program Director, Department of Pediatrics, San Francisco Medical Center, University of California, San Francisco, Calif. 94122.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SF-5 PATIENT-CARE PROGRAMS: DEMONSTRATION TEACHING PROJECTS IN FAMILY MEDICAL AND ADOLESCENT MEDICAL CARE

Purpose: To develop training programs for medical students and house officers and later, allied medical professionals, in delivery of health services to patients; to conduct research in the delivery of health services.
Methods: Combination of teaching the hard facts of health and illness with the skills of effective delivery of optimum health services to the patient. Primary areas of interest are on child health and maternal health, with consideration of the family and social aspects of health and illness.
Duration: Not reported.
Investigator(s): Robert J. Haggerty, M.D., Professor and Chairman, Department of Pediatrics, School of Medicine and Dentistry, University of Rochester, 260 Crittenden Blvd., Rochester, N. Y. 14620.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SF-6 PLAN TO PROMOTE AND STUDY THE EFFECTIVE UTILIZATION OF NON-PROFESSIONAL PERSONNEL IN CHILDREN'S BUREAU RETARDATION CENTERS

Purpose: To develop a plan to study the effective utilization of non-professional personnel in mental retardation centers.
Methods: Technicians at 10 Children's Bureau mental retardation centers will be trained to operate a decision-free psychometric data collection, analysis, and report-writing tool. Data will be collected by a diagnostic "decision-tree." Manually or electronically operated algorithms will yield various stages of raw and derived data displays, including an automatically generated report. The algorithms will process the raw data through a set of problem-solving matrices to yield numbered "patterns" corresponding to such sources of deviations from "normally expected psychometric score patterns" as general mental subnormality, low scores due to such mental handicaps as language or memory disorders, poor quality raw data due to inadequate patient challenge, clerical errors, etc.
Duration: Not reported.
Investigator(s): Henry J. Mark, Sc.D., Associate Professor of Pediatrics, Otolargyngology, and Environmental Medicine; Shirley Mark, M.A., and James T. Herriot, M.A., Instructors in Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Md. 21205.
Cooperating group(s): Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare.

21-SG-1 **FOLLOW-UP STUDY OF CHILDREN WHO PARTICIPATED IN A PREVENTIVE MENTAL HEALTH PROGRAM**

Purpose: To provide follow-up information concerning achievement, behavioral, and adjustive status of a group of school children who participated for their first three school years in an experimental program designed to prevent emotional disorders. Specifically, to determine (1) whether the already demonstrated positive effects of the program at the third grade level have endured over time, and (2) the course of development of the emotionally disturbed child for whom no specific treatment has been provided over time.
Subjects: Seventh grade students.
Methods: Children from the experimental school will be compared at seventh grade level with control school youngsters on a variety of school record measures (i.e., nurses' referrals, attendance, grades, achievement test scores, etc.) as well as on a test battery including personality and adjustment indices, teachers' ratings, sociometric peer ratings, etc. Finally, within the experimental school, the emotionally disturbed group will be compared with its non-disturbed peer group on the same school record and test measures.
Duration: Not reported-Summer 1967.
Investigator(s): Emory L. Cowen, Ph.D., Professor of Psychology and Director of Clinical Training, and Melvin Zax, Ph.D., Associate Professor of Psychology, University of Rochester, River Campus Station, Rochester, N. Y. 14627.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publication: Paper presented at Eastern Psychological Association meeting, April 1967.

ORGANIZATIONS

ALABAMA

- Auburn University 21-DC-7
- University of Alabama
  - Psychological Clinic 21-EG-2

ARIZONA

- Arizona Children's Colony 21-HJ-5
- Arizona State University
  - Psychology 21-DD-1
- Jane Wayland Child Center 21-JG-6
- Southern Arizona Mental Health Center
  - Psychology Department 21-KK-3
- University of Arizona
  - College of Education 21-DG-2
  - Psychology 21-KK-3
  - Speech 21-CC-2, 21-CG-1

ARKANSAS

- University of Arkansas
  - Medical Center
    - Pediatrics 21-BA-1
    - Psychiatry 21-GC-6

CALIFORNIA

- American Institutes for Research 21-OJ-1
- California State Department of Mental Hygiene
  - Camarillo State Hospital 21-KA-1
  - Napa State Hospital 21-JB-2, 21-JI-6
- California Youth Authority
  - Division of Research 21-KP-1
- Cedars-Sinai Medical Center
  - Department of Child Psychiatry 21-LA-4
- Community Day-Center Project 21-KP-2
- Contra Costa County Department of Education 21-QD-3
- The Hacker Clinic 21-KB-1
- Kaiser Foundation Hospital
  - Obstetrics and Gynecology, and Pediatrics 21-AA-5
- Neumeyer Foundation 21-RB-1
- Palo Alto Unified School District 21-DC-5
- Presbyterian Medical Center 21-AA-10
- Sacramento County Hospital Mental Health Services 21-CA-1
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- San Francisco State College
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- Stanford Convalescent Home 21-DC-5
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  - Syracuse
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NORTH CAROLINA

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- Duke University
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  - Pediatrics and Poison Control Center 21-KH-2
- Murdoch Center
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NORTH DAKOTA

- University of North Dakota 21-KE-4

OHIO

- Antioch College
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- Children's Hospital
  - Outpatient Department 21-DC-6
- Citizens' Committee on Youth 21-KC-1, 21-KQ-1, 21-QG-4
- East Central Citizens Organization 21-RB-5
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- Oberlin College
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  - Columbus
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- Ohio Youth Commission 21-KH-3
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  - Teachers College 21-FB-1
- Western Reserve University
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OKLAHOMA

- Southeastern State College 21-DA-1
- University of Oklahoma
  - Medical Center
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OREGON

- Oregon Fairview Home 21-KR-4
- University of Oregon
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PENNSYLVANIA

- Bryn Mawr College 21-QE-4
- Bucknell University
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- Devereux Schools 21-JI-4
- Duquesne University
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- Eastern Pennsylvania Psychiatric Institute 21-HF-1
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- Hahnemann Medical College
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- Pennsylvania State University
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- Philadelphia Center for Research in Child Growth 21-AA-9
- St. Christopher's Hospital for Children 21-HF-1
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  - Anthropology and Sociology 21-NG-3
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- University of Pennsylvania
  - Anthropology 21-AA-9
- University of Pittsburgh
  - School of Medicine
    - Graduate School of Public Health 21-MB-2
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PUERTO RICO

- University of Puerto Rico
  - School of Medicine
    - Public Health and Preventive Medicine 21-KR-3

RHODE ISLAND

- Barrington Public Schools 21-QC-2
- Brown University
  - Psychology 21-DB-2
- University of Rhode Island
  - Psychology 21-DB-2

TENNESSEE

- George Peabody College for Teachers
  - Psychology 21-OG-4

TEXAS

- Austin State School 21-HJ-4
- Baylor University
  - College of Medicine
    - Pediatrics and Psychiatry 21-CC-4, 21-CC-5, 21-EA-1, 21-JH-1, 21-JH-7
- El Paso Boys' Club 21-KK-5
- Harris County Center for the Retarded 21-HH-1
- Texas A. & M. University
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- Texas Institute of Child Psychiatry 21-CC-4, 21-CC-5, 21-EA-1, 21-JH-1, 21-JH-7
- Texas Western College
  - Education 21-PB-10
- University of Houston
  - Psychology 21-DH-3
  - Special Education 21-CC-5
- University of Texas
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  - Medical Branch
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  - Southwestern Medical School
    - Psychology 21-JG-2

UTAH

- Utah State University
  - College of Family Life 21-KE-2

VERMONT

- Counseling Service of Addison County 21-RB-2

VIRGINIA

- Fairfax County School Board 21-QC-1
- Richmond Public Schools 21-OE-1

WEST VIRGINIA

- Charleston Youth Community, Inc. 21-KC-2

WASHINGTON

- Children's Orthopedic Hospital 21-LG-1
- Mental Health Research Institute 21-FD-2
- University of Washington
  - Psychiatry 21-LG-1
  - Psychology 21-EA-2
  - School of Medicine
    - Clinic for Child Study 21-SF-1

WISCONSIN

- Eau Claire City County Health Department 21-CC-1
- Milwaukee Public Schools 21-PB-9, 21-QE-6
- Unified School District No. 1 (Racine) 21-OJ-3
- University of Wisconsin
  - Madison
    - Education, Mathematics, and Research and Development Center for Cognitive Learning 21-PA-1
    - Educational Psychology 21-OG-1
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  - Milwaukee 21-OJ-3
    - Anthropology and Social Welfare 21-FC-1
- West Bend Public Schools 21-PB-9

WYOMING

- University of Wyoming
  - Psychology 21-QG-1
- Wyoming State Hospital 21-QG-1

NATIONAL

- American College of Obstetricians and Gynecologists 21-SD-3
- Camp Fire Girls, Inc. 21-RB-3
- Florence Crittenton Association of America, Inc. 21-KA-4
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- McGill University
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- Montreal Children's Hospital 21-EE-1
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- University of Alberta 21-QE-7
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ISRAEL

- Hebrew University
  - Institute of Criminology 21-KE-5
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MEXICO

- American School 21-DH-6

SCOTLAND

- University of Aberdeen
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- Ministry of Education, Trinidad 21-OF-3

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RESEARCH NOTES

CENTER FOR RESEARCH AND ADVANCED TRAINING IN DEAFNESS REHABILITATION

The Center for Research and Advanced Training in Deafness Rehabilitation was initiated at New York University under the sponsorship of the Vocational Rehabilitation Administration. The Center's program is organized around three main branches: Training, Research, and Consultation. In research, the major concern is with the field of human communication, programmatically designed for integrated studies of the multiple aspects of communication. (Hearing & Speech News, March 1967.)

NATIONAL LABORATORY IN EARLY CHILDHOOD EDUCATION

The Office of Education, U. S. Department of Health, Education, and Welfare, has established a National Laboratory in Early Childhood Education, under which centers have been set up at seven colleges and universities. These centers will represent a diversity of philosophies and approaches to early childhood education. Research and development activities of the Laboratory will be coordinated by the Center at the University of Illinois (which is also one of the eighteen ERIC Clearinghouses referred to on the following page). Information on the National Laboratory may be obtained from Dr. J. McVicker Hunt, Director, National Coordination Center, 805 West Pennsylvania Ave., Urbana, Ill. 61801.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind. 47907.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn. 06102.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. 48103. (Gives synopses of U. S. doctoral dissertations with an annual index.)
dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington, D. C. 20002.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York, N. Y. 10029.
Inventory of Social and Economic Research in Health, Health Information Foundation, 5555 So. Ellis Ave., Chicago, Ill. 60637.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York, N. Y. 10017.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y. 10019.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W. Washington, D. C. 20036.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago, Ill. 60612.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. South, New York, N. Y. 10003.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York, N. Y. 10024.

Through the Educational Resources Information Center (formerly the Educational Research Information Center), better known as ERIC, current research and research-related information will be made available to teachers, administrators, researchers, commercial organizations, and others. ERIC also includes eighteen clearinghouses, or documentation centers, located at universities and other institutions throughout the country. Each clearinghouse will concentrate on a different subject-matter area. More complete information may be obtained by writing to the Director of ERIC, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20202.

The Excerpta Medica Foundation, New York Academy of Medicine Building, 2 E. 103rd St., New York, N. Y. 10029, has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, the Foundation can provide to subscribers, at cost, photocopies and translations of complete articles.

The Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Minnesota Family Study Center can supply to interested scholars bibliographic information from the Inventory of Published Research in Marriage and Family Behavior. Requests for information should be addressed to the Director, Inventory of Published Research in Marriage and Family Behavior, Social Science Tower 1026, University of Minnesota, Minneapolis, Minn. 55455. (Journal of Marriage and the Family, May 1966, p. 142.)

The Library of the National Society for Crippled Children and Adults has initiated a photoduplication service for persons engaged in rehabilitation research. It is available without charge to personnel in educational or research institutions and health or welfare agencies, public or private. This service hopes to provide the necessary professional literature not available in local libraries. Further information may be obtained by writing to the Librarian of the Society, 2023 W. Ogden Ave., Chicago, Ill. 60612. (Rehabilitation Literature, April 1966, p. 109.)

The Science Information Exchange, Smithsonian Institution, 209 Madison National Bank Bldg., 1730 M St., N. W., Washington, D. C. 20036, provides to qualified investigators on request selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

The Library of the National Bureau for Child Welfare (Voor Kinderbescherming), Stadhouderslaan 150, The Hague, publishes abstracts of articles in the field of child welfare each month. These are in Dutch, but those familiar with the Universal Decimal System would be able to understand something about the article. The subscription rate for documentation on cards is 30 guilders (approximately $8.40).

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic Act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research relating to children in order to make such information available for the use of investigators, administrators, program planners, and practitioners.

Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. A free copy of each issue is also sent to directors of research centers and to libraries. In addition, the Clearinghouse maintains a mailing list of interested persons who receive announcements of new issues as they are published. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The Children's Bureau Clearinghouse routinely exchanges information with the Science Information Exchange of the Smithsonian Institution. This organization is very helpful in providing abstracts of research supported by federal funds and by many foundations.

The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL AND REHABILITATION SERVICE

Children's Bureau
Washington, D.C. 20201

INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D C. 20201

If you or your colleagues are currently engaged in research on children or their families, we would greatly appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to provide research investigators with information about other research in progress, to point up gaps in present research, and thereby to stimulate more effective research.

The instructions on the preceding page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

____

Thank you for your cooperation.

INFORMATION SUPPLIED BY	Name ____________________________
	Position __________________________
	Organization and address _________________
	________________________________
	_______________ ZIP CODE ____________

SUMMARY OF RESEARCH PROJECT

Title:

Purpose:

Subjects (sample):

Methods:

Findings to date, if any:

Date project initiated: Estimated terminal date:

Principal investigator(s) only Degree Position and organization

Cooperating groups (in the research or in the funding of the research):

Publication references and/or plans (If no publication is planned, please indicate under what conditions data and results will be available):

If this represents work toward an academic degree, please state degree ____________________.
(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry.)

Clearinghouse, Children's-Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name ______________________________________
Address ____________________________________
______________________________ Zip Code ________

Name ______________________________________
Address ____________________________________
______________________________ Zip Code ________

Name ______________________________________
Address ____________________________________
______________________________ Zip Code ________

Name ______________________________________
Address ____________________________________
______________________________ Zip Code ________

Signed ____________________
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__________ Zip Code ________

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CLEARINGHOUSE PUBLICATIONS

Bibliography on the Battered Child, May 1966. Copies free from the Clearinghouse, Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.

Research Relating to Juvenile Delinquents, 1966. A listing of studies reported to the Clearinghouse between 1948-1961, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office, Washington, D. C. 20402, for 35 cents.

Research Relating to Mentally Retarded Children, 1966. A listing of studies reported to the Clearinghouse between 1948-1965, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office for 65 cents.

Research Relating to Children.* An inventory of abstracts of ongoing or recently completed research studies published once or twice a year. Single copies of the following issue are available without charge from the Clearinghouse. (Dates indicate period during which studies were reported to us.)

Bulletin II, Supplement 4 (February-November 1955)

The following issues are available for purchase directly from the Government Printing Office, at the prices indicated:

Bulletin 17 (February 1963-February 1964) - 75 cents
Bulletin 18 (March-December 1964) - $1.25
Bulletin 19 (January-September 1965) - $1.50
Bulletin 20 (October 1965-May 1966) - $1.25

All issues not listed above are OUT OF PRINT but are available in many libraries.

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*An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. A free copy of each issue is available to libraries and research centers. The Clearinghouse also maintains a mailing list of interested persons who receive announcements of new issues as they are published.

bulletin no. 22

RESEARCH relating to CHILDREN

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL and REHABILITATION SERVICE
children's bureau
1968

1178

CHILDREN'S BUREAU - Arthur J. Lesser, Acting Chief
Division of Research - Charles P. Gershenson, Director
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CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

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RESEARCH relating to CHILDREN

Bulletin 22

Current and recently completed studies on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIO-ECONOMIC and CULTURAL FACTORS
- SOCIAL SERVICES
- HEALTH SERVICES

May-December 1967

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

For sale by the Superintendent of Documents, U.S. Government Printing Office
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FOREWORD

This Bulletin, like previous issues, includes reports of research in progress or recently completed. With the exception of the long-term research, it does not report again studies included in Bulletins 3 through 21 even though they may still be continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse May through December 1967.

The Clearinghouse has only such information about the studies as the abstracts provide. Publication references and plans are given by some of the investigators but the Clearinghouse does not maintain bibliographic information on published reports of the studies. The reader who wishes to obtain further details about any of the projects reported should check professional journals in the appropriate field or write directly to the investigator.

For the Clearinghouse, I wish to thank those who have submitted reports on their own projects and those who have told us of other studies, and to acknowledge the valuable assistance of the Science Information Exchange, and the foundations which provide us with information about their research grants.

Arthur J. Lesser

Arthur J. Lesser, M.D.
Acting Chief, Children's Bureau
SOCIAL AND REHABILITATION SERVICE

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 121 is a form for letting us know of other investigators who are working in the field. Page 118 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG-TERM RESEARCH

Note: The reports in this section concern research programs which are more or less continuous.

22-AA-1 GROWTH, DEVELOPMENT, AND ADAPTATION OF HUMAN INDIVIDUALS

Purpose: To gain greater understanding of many factors involved, prenatal and post-natal, as an individual is in the process of becoming the kind of a person he is as an adult.
Subjects: Approximately 100 middle class families in Denver, Colorado, including 210 offspring of whom over 50 are second generation followed in the institute. (Eighty percent of subjects entered since 1930 are still being followed.)
Methods: Each subject followed from birth at regular intervals studying: (1) pattern of changing structure by direct measurements, X-rays, and photographs; (2) development of personality traits, starting with family during prenatal period and carried on intensively with infant, child, and adult; (3) patterns of physiological development including nutrition, biochemical and physiological tests, and evaluation of healthiness.
Duration: 1927-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Child Research Council, University of Colorado Medical Center, Denver, Colo. 80220.
Cooperating group(s): University of Colorado; Commonwealth Fund; McDonald Foundation; National Dairy Council; Jones Foundation; Nutrition Foundation; Gerber Company; Lawrence Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Appropriate medical or scientific journals every year. Publication lists available.

Note: Changes have been made in original plans for this study. Analysis is being made of existing data on physical growth, nutrition, radiological studies, and health records of subjects prior to January 1967.

22-AA-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Investigator(s): Research has been discontinued, but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor and Head, Department of Biostatistics, Harvard School of Public Health, Boston, Mass. 02115.

22-AA-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment, and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental child-rearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio 45387.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

22-AA-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long-term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from pre-puberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric, and psychological examinations together with family interviews (with evaluation of child-rearing practices), nutrition, and socio-cultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socio-economic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left-handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Research Associate in Human Growth and Development, Harvard School of Public Health, Boston,

BEST COPY AVAILABLE

Mass. 02115; present address: Harvard Florence Research Project, Via Venezia 10, Florence, Italy.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publications: Perceptual and Motor Skills 23:35-40, 1966; Bulletin of the International Epidemiological Association 12:1936, 1965; American Journal of Diseases of Children 106:568-577, 1963; papers and other articles; one book planned, another possible.

22-AA-5 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT

Purpose: To investigate the relationship of biologic, genetic, and environmental factors in the parents--including events during pregnancy, labor, and delivery--to normal and abnormal development of offspring. Expected byproducts of investigation are relationships of these factors to pregnancy wastage in the form of early fetal death, perinatal mortality, infant and childhood mortality, and estimates of incidence of different types of abnormalities. In addition, detailed growth curves for children from birth to six years of age will be derived on a longitudinal basis, also estimates of illnesses and injuries in infancy and the pre-school child.
Subjects: Members of the Kaiser Foundation Health Plan--a pre-paid medical care program--who reside in the San Francisco-East Bay area.
Methods: Study is of a prospective, longitudinal type for both mother and child. Observations are made on the gravidas in the Department of Obstetrics and Gynecology, and on the children in the Pediatric Department, and are supplemented by special interviews and laboratory examinations. Physicians' observations are systematized and made more uniform. Special efforts are made to obtain information on members of study who do not return to the plan for medical care.
Duration: July 1959-indefinite.
Investigator(s): Jacob Yerushalmy, Ph.D., Professor of Biostatistics, School of Public Health, University of California, Berkeley; Stephen Thomas, M.D., Director, Department of Obstetrics and Gynecology, and Edgar Schoen, M.D., Director, Department of Pediatrics, Kaiser Foundation Hospital, Oakland, Calif.
Cooperating group(s): Permanente Medical Group; Kaiser Foundation Research Institute.
Publications: Journal of Pediatrics 71:2:164-172, August 1967; Pediatrics 39:940-941, 1967; American Journal of Obstetrics and Gynecology 88:4:505-518, February 15, 1964; other articles.

22-AA-6 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of normally healthy persons from birth in 1928-1929 to the present.
Subjects: 60 full-term, healthy newborns, born in Berkeley, California hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above-average group; 140 offspring of these subjects, age range from a few months to about 20 years, seen irregularly, but same data (appropriate for age) collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and

recent illnesses. Anthropometrics, body photographs, and skeletal X-rays taken at most ages. Socio-economic data available. Adult records include mental tests, physical examinations, anthropometrics, and current status interview. Studies of physical aspects of growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socio-economic status, intellectual and physical growth.
Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Research Psychologists, Institute of Human Development, University of California, Berkeley, Calif. 94720.
Publications: Monograph of the Society for Research in Child Development 28, 1963; Growth Diagnosis. Chicago: University of Chicago Press, 1959; Child Development 12:167-173, 1941 and 27:45-74, 1956; others.

22-AA-7 MEDFORD, OREGON BOYS' GROWTH STUDY

Purpose: To construct physical and motor growth curves of boys 7 to 18 years of age; to relate physical and motor traits to physiological maturity, physique type, socio-personal adjustment, interests, and scholastic aptitude and achievement.
Subjects: Cross-sectional samples: 40 boys at each age 9 through 15 years; longitudinal samples: 100 boys at ages 7, 9, 12, and 15 years; tested annually to 18 years.
Methods: Construction of growth and growth acceleration needs; extent of individual differences; contrasting extreme groups on various tests; zero-order, partial, and multiple correlations; factor analysis; multiple regression equations; special studies of athletes; and profile charts of outstanding athletes.
Findings: Contained in 62 master's and doctor's theses to date.
Duration: October 1955-June 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor of Physical Education, School of Health, Physical Education, and Recreation, University of Oregon, Eugene, Ore. 97403.
Cooperating group(s): Oregon State Education Department; Southern Oregon College; Office of Scientific and Scholarly Affairs, University of Oregon Graduate School; Athletic Institute, Chicago.
Publications: Series of brochures planned, to be published by Prentice-Hall, Inc., Englewood Cliffs, N. J.

22-AA-8 GROWTH OF PSYCHOPHYSIOLOGICAL PATTERNS IN INFANCY

Purpose: To investigate the origins and course of development of individual differences in neonates. (See Research Relating to Children, Bulletin No. 21-AA-8.)
Subjects: Normal, healthy full-term babies, 2 to 5 days old, born at Bronx Municipal Hospital Center.
Methods: A neonatal behavioral profile established in prior studies in this laboratory will be used. This profile includes behavioral and heart rate ratings on excitation, soothing, feeding, sleep, and non-stimulus periods of observation. Neonates will be followed at two weeks, one, two, three, and four months of age to measure the stability of early-appearing traits and their relation to later behaviors.

Findings: Data will be analyzed with respect to stability of early-appearing behaviors and relationship between neonatal behavior and maternal and birth history.
Duration: 1966-continuing.
Investigator(s): Wagner H. Bridger, M.D., Associate Professor of Psychiatry, and Beverly Birns, Ph.D., Assistant Professor of Psychology, Albert Einstein College of Medicine, Yeshiva University, Bronx, N. Y. 10461.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: In Early Experience and Behavior, Grant Newton and Seymour Levine (Eds.). In press, 1968; Psychosomatic Medicine 28:316, 1966; Child Development, September 1965; others.

22-AA-9 PHILADELPHIA CENTER FOR RESEARCH IN CHILD GROWTH

Purpose: To develop standards and norms of physical growth and development of normal, healthy children of the Philadelphia area.
Subjects: White and Negro children, male and female. Data are longitudinal (usually annual), based on two major samples: birth to 7 years, and 6 to 17 years. Cephalometric (measurement of head, face, jaws) and somatometric (trunk, limbs) standards of second group (white, colored) are already available; those of first group (white only) will be within the year.
Methods: Cephalometry and somatometry. Measurements are linear, transverse, sagittal, circumferential, skin thickness (via skin calipers), X-ray films of left hand (routinely) and of upper arm or lower leg (reduced number of cases); also of head and face in norma laterales sinistra and norma faciales (roentgenographic cephalometry). Dental models are taken in most cases. Histories secured are: (1) familial in terms of ethnic background and socio-economic status; (2) medical (illness) and dental (occlusion, dental stage, oral habits); (3) genetic, in terms of the familial occurrence of trait(s) being considered. All data may be referred to several age categories: (1) chronological age (C.A.); (2) dental or eruptive age (D.A.); (3) skeletal or biological age (S.A.). All data have been put on microfilm, coded, and stored in computer memory. (1) School Series: initially based on 600 normal, healthy white school children from five Philadelphia schools, 6 to 12 years of age (ultimately followed to 22 schools). These children have provided the core data upon which our 6- to 17-year standards are based. (2) American Negro Series: based on the semi-annual study of some 500 elementary school children. These children have provided the core data upon which our 7- to 17-year standards are based. (3) Orthodontic Series: now numbering some 2,700 children from the Orthodontic Clinics of the University of Pennsylvania (2,200) and the Children's Hospital (500). All of these children have been followed through their treatment course (2 to 4 years, average). On about 10 percent of them there are post-treatment follow-up studies. (4) Cleft Palate Series: in cooperation with the Children's Hospital. These data are, for the most part, single pre-operative roentgenographic cephalometric, plus selected somatometry (H, W, shoulder B, chest B and D, hip B, etc.). There are some 600 such records; in about 10 percent there are follow-up data. (5) Cooley's Anemia Series: based on some 120 children. Measurements, X-ray films, familio-genetic histories, and therapeutic treatment. Data are longitudinal, on an annual basis. (6) Endocrine and Chromosomal Series: seen on a referral basis from Children's Hospital. Data are follow-up, though sporadically and irregularly so.
Investigator(s): Wilton M. Krogman, Ph.D., LL.D., Director, Philadelphia Center for Research in Child Growth, and Professor and Chairman;

and Francis E. Johnston, Ph.D., Assistant Director, The Center, and Associate Professor of Anthropology, Department of Physical Anthropology; Geoffrey F. Walker, B.D.S., Director of the Philadelphia Center for Cranio-facial Biology, and Research Associate in Orthodontics, Department of Orthodontics, Division of Graduate Medicine, University of Pennsylvania, Philadelphia, Pa. 19146.
Cooperating group(s): Children's Hospital of Philadelphia; Philadelphia Board of Public Education; School System, Archdiocese of Philadelphia; National Institute for Dental Research and National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-AA-10 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns of all children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Co-chairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto; and Saul J. Robinson, M.D., 2300 California St., San Francisco, Calif. 94115.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publications: Journal of Pediatrics 62:5:631-645, May 1963; Journal of Clinical Endocrinology and Metabolism 22:1127-1129, November 1962.

22-AA-11 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, AND PHYSICAL GROWTH, AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intra-oral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950-continuing.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Chairman, Child Study Clinic, Dental School, University of Oregon, Portland, Ore. 97201.
Cooperating group(s): Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Dairy Council; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Growth 31, 1967; Human Biology, May 1967; Archives of Oral Biology 12, 1967; others.

22-AA-12 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Methods: Series of films of hand, elbow, shoulder, hip, knee and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions of the 1955 Knee Standard and the 1959 Hand Standard have been tested since 1965.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University School of Medicine, Cleveland, Ohio 44106; and William W. Greulich, Ph.D., Research Biologist, National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.
Publications: The Knee Standard is scheduled for publication in 1968.

Note: The Bulletin expects to have more current information on this study in the next issue.

22-AA-13 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental sub-normality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the re-evaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956-continuing.
Investigator(s): Heinz W. Berendes, M.D., National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014. Collaborating institutions: Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Ore.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.
Publications: Bibliography available from Dr. Berendes; in Research

Methodology and Needs in Perinatal Studies, Chapters 5 and 6, S. S. Chipman, A. M. Lilienfeld, B. G. Greenberg, and J. F. Donnelly (Eds.). Springfield, Ill.: Charles C. Thomas, 1966; Summary of Progress in Collaborative Perinatal Research (A Nationwide Mother-Child Study), Public Health Service Research Profile No. 9, PHSP No. 1161, 1964.

22-AA-14 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with families and character training agencies. (Character is defined in terms of three dimensions: philosophy of values, breadth of social vision, and strength of purpose.)
Subjects: Children and families throughout the United States. These are in churches, YMCA's, and schools, and participate as individual families.
Methods: The methods of development are based on action research, in which the participants cooperate with the laboratory, using methods of co-scientist research. Open-ended reports on research goals constitute the basic body of research data. An analysis of this data serves as the basis for the development of new procedures and for the scientific reports which are published concerning it.
Findings: Reports have been prepared concerning hypotheses being tested in the home and character-building agencies. Most of the findings relate to the home, learning, decision-making, and methods for character development, plus descriptions of age-level potentials, especially for decision-making.
Initiation date: 1935-continuing.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Leona J. Smith, Ph.D., Research Associate, and staff, Union College Character Research Project, 10 Nott Terrace, Schenectady, N. Y. 12308.
Cooperating group(s): Lilly Endowment, Inc.
Publications: Character Potential: A Record of Research; How to Stand Up for What You Believe, Herbert J. Detweiler. New York: Association Press, 1966; The Marriage Climate, Ernest M. Ligon and L. J. Smith. St. Louis, Mo.: Bethany Press, 1963; others.

GROWTH AND DEVELOPMENT

General

22-BA-1 ABERDEEN CHILD DEVELOPMENT PROJECT

Purpose: To determine the relative contribution of obstetric, social, and educational influences to development and particularly, to the later emergence of handicaps.
Subjects: The 14,000 children born between October 1951 and September 1955, resident in Aberdeen in December 1962.
Methods: Detailed case notes relating to their births are available for 11,820 of the children. Further information has been collected on their parental and social background, school progress and achievement, levels of intellectual functioning, and physical and mental health.
Duration: Not reported.
Investigator(s): Raymond Illsley, Professor, Department of Sociology; Gordon Horobin, and D. J. Oldman, Sociologists, and W. R. Bytheway, Statistician, Medical Sociology Research Unit, University of Aberdeen, Foresterhill, Aberdeen, Scotland.
Cooperating group(s): Association for the Aid of Crippled Children.

22-BA-2 STUDIES OF INTELLECTUAL AND PERSONALITY DEVELOPMENT OF CHILDREN FROM CULTURALLY DEPRIVED BACKGROUNDS

Purpose: To investigate the intellectual and personality development of children who have been subjected early in life to disadvantages and traumatic experiences.
Subjects: Children, ages three and four, enrolled in Head Start nursery classes in the Greater Washington area.
Methods: Analysis of learning environments of pre-school children; studies of cognitive, social, and personal characteristics; studies of inter-relationships between personality characteristics and cognitive styles, between language development and impulse control (capacity to modulate motor activity and the expression of aggressive impulses, and delay gratification) and between specific environmental variables and intellectual and personality development. Data are obtained through standardized tests and natural and structured situational observations. Capacity to delay gratification and inhibit motor activity is being studied in an experimental situation; data on other aspects of impulse control, ego functions, and coping behavior are obtained through direct observation.
Duration: 1967-1969.
Investigator(s): Leon J. Yarrow, Ph.D., Chief, and Michael Fishman, M.D., Psychiatrist, Social and Behavioral Sciences Branch, National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

22-BA-3 BEHAVIORAL, INTELLECTUAL, AND PSYCHOPHYSIOLOGICAL CORRELATES OF THE HYPERACTIVE SYNDROME IN CHILDREN

Purpose: To investigate cognitive disabilities and parameters affecting learning in hyperactive children; to study the psychophysiological correlates of hyperactivity.

Subjects: Hyperactive children, ages 8 to 13.

Methods: Data are collected from a battery of cognitive tests, classroom observations, and psychophysiological measures, including galvanic skin response, heart rate, and finger tremor.

Duration: 1962-1969.

Investigator(s): Virginia I. Douglas, Ph.D., Associate Professor of Psychology, McGill University, and Senior Psychologist, Montreal Children's Hospital, Montreal, Quebec, Canada.

Cooperating group(s): Medical Research Council.

Publications: Book in preparation, 1967.

22-BA-4 ORIGINS AND DEVELOPMENT OF DIFFERENTIATION

Purpose: To trace longitudinally the precursors and development of psychological differentiation.

Subjects: Newborn infants and their parents.

Methods: Infants are observed for physiological and behavioral development and followed for three years. Two home visits are made to observe the mother-infant interaction in the "comforting situation". Tests of perceptual field-dependence and other indicators of psychological differentiation are administered to parents and to children at age two-and-one-half to three years.

Duration: September 1966-August 1971.

Investigator(s): Rita W. Clark, M.D. (D.M.S. Candidate), Instructor, Department of Psychiatry, State University of New York, Downstate Medical Center, Brooklyn, N. Y. 11203.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-BA-5 DEVELOPMENTAL PSYCHOPHYSIOLOGY

Purpose: To investigate spontaneous fluctuations in physiological response systems, habituation of orienting responses, differentiation of physiological responses, and the development and extinction of conditional responses as a function of the aging process.

Subjects: Boys, ages 7 to 8, whose parents have some form of psychosis.

Methods: EDR and vasomotor activity are recorded bilaterally while back of hand is stimulated with cool and warm air.

Duration: Not reported.

Investigator(s): John A. Stern, Ph.D., Professor of Psychology, and Director of Research, and Jon M. Plapp, Ph.D., Research Associate, Behavior Research Laboratory, Washington University, St. Louis, Mo. 63104.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-BA-6 LONGITUDINAL GROWTH OF INDIAN CHILDREN

Purpose: To develop normative data on Indian infants.
Subjects: Infants, ages 1 to 15 months; sample to be expanded to include urban lower economic group, four castes in village, and sample from a pediatric clinic.
Methods: Testing program using Bayley Infant Scales should lead to conclusions on reliability and validity of Bayley Scale in Indian culture, normative data on motor and mental development at various months for well children and those with certain diseases, and should make possible cross-cultural comparisons of motor and mental development.
Duration: December 1966-December 1968.
Investigator(s): Promila Phatak, Ph.D., Research Director, Child Development Program, Faculty of Home Science, M.S. University of Baroda, Baroda 2, Gujaret, India.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

22-BA-7 THE INFLUENCE OF CHRONIC DISEASE ON THE ADOLESCENT DEVELOPMENTAL PERIOD

Purpose: To study the effect of chronic medical diseases on the biological, physiological, and psychological development of adolescents; to eventually plan long-term medical-social-educational goals for these patients.
Subjects: All patients, ages 13 to 19, enrolled in the Adolescent Outpatient Service and/or admitted to the Adolescent Inpatient Unit of the Montefiore Hospital and Medical Center.
Methods: Group therapy is provided for a number of patients with rheumatic heart disease who present delinquency problems to the Adolescent Cardiac Clinic; a weekly peer group-oriented seminar-conference is held with adolescent females with severe exogenous obesity; complete anthropometric, biochemical, and psychological evaluation is made of all adolescents with chronic diseases such as asthma, diabetes, ulcerative colitis, collagen disease, chronic renal disease, etc., to ascertain the major areas of debilitation. This will be a multiple disciplinary approach employing a physician, research psychologist, and medical social worker in conjunction with medical house staff and nursing personnel from the Adolescent Unit of the Montefiore Hospital and Medical Center.
Duration: September 1967-September 1969.
Investigator(s): Michael I. Cohen, M.D., Director, Adolescent Unit, Montefiore Hospital and Medical Center, and Assistant Professor of Pediatrics, Albert Einstein College of Medicine, Yeshiva University; and Sheila Weinberg, Ph.D., Research Social Psychologist, Division of Pediatrics, Montefiore Hospital and Medical Center, Bronx, N. Y. 10467. (Reported by Laurence Finberg, M.D., Division of Pediatrics, Montefiore Hospital and Medical Center.)
Publications: Publication planned in appropriate medical periodicals.

Physical

22-CA-1 RESEARCH INTO FACTORS INFLUENCING CHILD GROWTH AND DEVELOPMENT IN AN AGRICULTURAL POPULATION IN JAMAICA

Purpose: To study the development of rural Jamaican children; to attempt to pinpoint the time at which growth faltering occurs, and to determine its likely causes.
Subjects: Children under age five in a representative rural population at Lawrence Tavern, Jamaica.
Methods: Present study is semi-longitudinal and supplements a longitudinal study of infants born in the same area between November 1962 and October 1963. Routinely collected anthropometric data are related to detailed information obtained concurrently on background, diet, illnesses, and child care.
Duration: 1964-not reported.
Investigator(s): Dr. W. E. Miall, Director, H. G. Lovell, Statistician, and Miss P. Heneage, Assistant Statistician, Medical Research Council's Epidemiological Research Unit; Dr. K. L. Standard, Senior Lecturer, Social and Preventive Medicine Department; and H. I. McKenzie, Sociologist, University of the West Indies, Mona, Kingston 7, Jamaica.
Cooperating group(s): Association for the Aid of Crippled Children.

22-CC-1 THE DEVELOPMENT OF AUDITORY DISCRIMINATION

Purpose: To test the hypothesis that children from disadvantaged environments will have greater difficulty in making auditory discriminations than will their middle class counterparts.
Subjects: 30 middle and 30 lower class males each from the first, third, and fifth grades, each group of 30 consisting of 15 Negro and 15 white boys.
Methods: A battery of auditory perceptual discrimination measures and one visual discrimination measure are administered. Scores on perceptual measures are compared with reading scores and group intelligence test (Lorge-Thorndike) scores; group differences are evaluated. Implications will be drawn for both the auditory hypothesis and the relationship between perceptual discrimination skill and reading at different age levels.
Duration: Not reported.
Investigator(s): Cynthia P. Deutsch, Ph.D., Institute for Developmental Studies, School of Education, New York University, New York, N. Y. 10003.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-CF-1 DENTAL ATTITUDE FORMATION AND PREVENTIVE CARE UTILIZATION

Purpose: To evaluate the relationship between child and maternal dental attitude at various ages, and attitude of children with varying dental experiential backgrounds; to evaluate children exposed to an "ideal" treatment experience with regard to pre- and post-treatment attitude; to evaluate preventive care-oriented practices of children treated under experimental program.

Subjects: Low through middle-middle income children, ages 8 to 12.
Methods: Structured interviews are held with mothers and children. A dental history is obtained and the child examined, with physiological monitoring during dental treatment.
Duration: September 1966-August 1968.
Investigator(s): Jack W. Howitt, D.D.S., Research Associate and Associate Pedodontist, Eastman Dental Center, 800 Main St. E., Rochester, N. Y. 14603.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publications planned.

22-CF-2 THE CHRONOLOGICAL SIGNIFICANCE OF DENTAL AND ORAL DEFECTS AND THEIR RELATIONSHIP TO NEUROLOGICAL AND DEVELOPMENTAL ABNORMALITIES

Purpose: To clarify relationship of developmental dental abnormalities to neurological and physical maldevelopment.
Subjects: Patients attending the Children's Evaluation and Rehabilitation Clinic of Albert Einstein College of Medicine.
Methods: Complete dental, neurological, and psychological studies with correlations of findings so as to identify time of insult to the organism, types of resultant neurological and dental defects, and relationship to other developmental anomalies.
Findings: The incidence of developmental dental defects appears to be higher in a neurologically abnormal population and occurs concomitantly with other more general developmental anomalies. Dental defects are often useful chronologic markers and may provide helpful diagnostic information for determining time and type of insult to the developing organism.
Duration: February-November 1967.
Investigator(s): Harold Diner, D.D.S., Assistant Professor, and Herbert J. Cohen, M.D., Assistant Professor of Clinical Pediatrics, Albert Einstein College of Medicine, Yeshiva University, Bronx, N. Y. 10461.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Eventual publication planned.

22-CG-1 MOTOR SKILLS OF YOUNG CHILDREN: SEX DIFFERENCES

Purpose: To determine the effect of sex upon the performance of children on the rotary pursuit task, and the interactions of sex with grade and socio-economic class (school neighborhood) in predicting rotary pursuit performance.
Subjects: 128 elementary school children from an upper-middle class school and a lower class, inner-city school.
Methods: Each subject was given an individually administered session of five two-minute trials with a one-minute rest period between. The sex of the experimenter was systematically controlled. (Procedures were essentially the same as those described in Davol et al., *Perceptual and Motor Skills* 21:351-357, 1965.)
Findings: Preliminary analyses of the data indicate that there was some interaction between sex of experimenter and task difficulty (speed of rotation), and that sex differences were stronger in the performances of children in the lower socio-economic school.
Duration: February 1966-July 1967.

Investigator(s): Stephen H. Davol, Ph.D., Assistant Professor, Department of Psychology and Education, Mount Holyoke College, South Hadley, Mass. 01075.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be published in Perceptual and Motor Skills.

22-CH-1 AN EXPERIMENTAL STUDY OF THE EFFECT ON BABBLING OF VISUAL INTERACTION BETWEEN MOTHER AND INFANT

Purpose: To test Mowrer's autism theory of speech development in which he proposed that the infant's babbling is self-reinforced and self-gratifying, therefore not requiring a reaction from others for its continuation; to determine whether the frequency and duration of babbling vary with experimentally controlled visual interaction between mother and infant.
Subjects: 35 males and 25 females, ages 4 to 12 months; controls.
Methods: The babbling of the infants was tape recorded and measured under three test conditions: (1) absence of visual interaction (mother was seated in a different room from subject and remained silent until test condition was finished); (2) partial visual interaction (mother was seated three feet from infant, silently reading in full view of the subject, but not responding to subject's activity); (3) total visual interaction (mother was seated three feet from subject facing the infant, neither communicating verbally, smiling, nor nodding, but continuing to look at him until the test condition was finished). These conditions were presented in six randomized orders. Experimental design included controls for the intervening variables of fatigue, hunger, and physical discomfort. The frequency and duration of babbling in the three test conditions were compared to show whether babbling is independent of the infant's surroundings.
Findings: No significant differences were found among the experimental conditions. Infants did not babble more when alone or in the two presence conditions. Babbling seems to be independent of the infant's visual surroundings. Mowrer's autism theory as tested by this investigation is supported.
Duration: October 1965-May 1967.
Investigator(s): James Edward Parker, Ph.D., Center for the Study of Speech and Hearing, University of Southern California, Los Angeles, Calif. 90007. (Reported by William H. Perkins, Ph.D., Director, Center for the Study of Speech and Hearing.)
Publications: Copy of dissertation available in the University of Southern California Library.

22-CH-2 A STUDY OF SOME ASPECTS OF THE PLAY OF THREE- AND FOUR-YEAR-OLDS WHO HAVE DELAYED SPEECH

Purpose: To compare the play of nursery school children who have delayed speech, but who are otherwise normal, with that of a control group; to establish relationships between language and play; and to analyze the speech of the speech-retarded group.
Subjects: 3- and 4-year-old nursery school children; control group matched on a number of variables.
Methods: Each child was observed during play for four hours, the play being categorized under three conceptual frameworks. Each utterance was recorded, and the utterances of the speech-retarded group were analyzed

in terms of the rules for phrase structure grammar proposed by members of the Harvard Language Acquisition Board.
Findings: The play of three-year-old speech-delayed pupils differs only a little from that of normal speaking children. There are increasing differences from age four; mean number of morphemes per utterance correlates highly with amount of time spent in advanced forms of play.
Duration: July 1966-1967.
Investigator(s): K. Lovell, Ph.D., Reader in Education, University of Leeds, Leeds 2, England.
Publications: To be submitted for publication.

Intellectual

22-DA-1 PATTERNS OF INTELLECTUAL DEVELOPMENT DURING CHILDHOOD AND ADOLESCENCE

Purpose: To study the changes in structure and mental abilities at different ages as represented by performance on the Wechsler Intelligence Scale for Children (WISC); to interpret and possibly modify current theories of cognitive and psychomotor development in the light of these changes.
Subjects: 400 children, ages 5 to 16, selected at random from the school population.
Methods: WISC is administered at ages 5, 7, 9, 11, 13, and 15, and data are analyzed by means of appropriate factor analytic techniques at the various age levels.
Duration: May 1967-August 1968.
Investigator(s): Mohammed Y. Quereshi, Ph.D., Associate Professor of Psychology, Marquette University, Milwaukee, Wis. 53233.
Publications: Publication planned.

22-DA-2 A DEVELOPMENTAL APPROACH TO SPACE LOCALIZATION

Purpose: To investigate the interaction between perceptual and cognitive factors, and the changes in their relationship during development.
Subjects: Children, ages 5 to 15.
Methods: Areas of study include changes in size transposition with changes in physical dimensions or changes in labeling of correct responses during training; systematic developmental changes in the nature of transfer in situations which allow for generalization along either a perceptual or conceptual dimension; and two-person communication games involving transmission of information about spatial relationships.
Findings: Transposition is affected by intra- as well as inter-pair differences. Systematic developmental changes in the nature of transfer are obtained.
Duration: June 1966-May 1969.
Investigator(s): Joseph A. Glick, Ph.D., Assistant Professor of Psychology, Yale University, New Haven, Conn. 06520.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Papers in preparation, 1967.

22-DA-3 PRE-SCHOOL PROJECT

Purpose: To trace the development of educability in children during the first six years of life; to trace the role of experience in such development.
Subjects: Approximately 50 normal children each year, from birth to age six, selected for diversity along several dimensions such as ethnicity, intelligence, social class, and pre-school setting.
Methods: Approach is longitudinal and cross-sectional. Naturalistic observations are used to generate developmental inventories of tasks which pre-school children face, coping behaviors, abilities, and environmental saliencies. Hypotheses about the development of educability are being generated by this procedure and will be tested through further observation and experimental studies.
Findings: Tentative identification has been made of social and non-social abilities which distinguish very able from inept six-year-old children.
Duration: September 1965-continuing.
Investigator(s): Burton White, Ph.D., Director, Frances Litman, M.Ed., Assistant Director, E. Robert LaCrosse, Ph.D., Daniel Ogilvie, Ph.D., and Patrick Lee, Ph.D., Research Associates, Pre-school Project, Laboratory of Human Development, Harvard Graduate School of Education, Cambridge, Mass. 02138.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned for 1968; interim reports available.

22-DB-1 ANALYSIS OF COGNITIVE GROWTH OF CHILDREN AS SHOWN IN THEIR ORAL DISCUSSION AND WRITTEN COMPOSITIONS

Purpose: To provide evidence of logical abilities of children at different grade levels in elementary school.
Subjects: Children in grades two to six.
Methods: Children's compositions produced in four different writing situations are analyzed; taped oral discussions are compared with written work.
Findings: Results will yield information on (1) types of logical tasks children at different grade levels from two through six may reasonably be expected to accomplish; (2) types of linguistic expressions children use which indicate their place on the cognitive growth scale; (3) range of cognitive abilities apt to be found within an ordinary classroom at each grade level; (4) possible effects of prolonged experience under the Nebraska English Curriculum upon certain kinds of writing at each grade level; (5) whether a child's scores on standard I.Q. and Achievement Tests in Reading and Language may be considered an indication of his stage of cognitive growth; and (6) types of questions children in grades two through six write down during spare school time.
Duration: Not reported.
Investigator(s): Paul A. Olson, Ph.D., Professor of English, and Co-Director, and Elizabeth T. Carpenter, Ph.D., Content Analyst, Nebraska Curriculum Development Center, University of Nebraska, Lincoln, Neb. 68508.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-DB-2 THE CHILD'S LINKS BETWEEN TOUCH, VISION, AND THOUGHT

Purpose: To investigate conditions affecting cross-modal recognition and cross-modal transfer; to explore the role of handling in children's identification of objects and assignment of meaning to objects.
Subjects: Kindergarten, second, and fourth grade children.
Methods: A variety of perceptual and cognitive tasks.
Findings: From a comparison of uses for objects under conditions of looking and handling, it appears that kindergarten children give more, and more varied, uses for objects when allowed to handle as well as look at them.
Duration: September 1966-September 1969.
Investigator(s): Jacqueline J. Goodnow, Ph.D., Associate Research Professor of Psychology, George Washington University, Washington, D. C. 20006.
Cooperating group(s): Montgomery County, Md. Department of Education; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to Child Development.

22-DB-3 FAMILY INTERACTION AND COGNITIVE DEVELOPMENT

Purpose: To develop a brief, untaxing method by which to study parent-child interaction in a cognitive task, which may then be analyzed both quantitatively and qualitatively.
Subjects: Ten "normal" males, ages seven to eight, with I.Q.'s ranging from 95 to 110 as measured by the WISC, and their parents, all of lower class and residing in the same geographical area.
Methods: Child is pre- and post-tested twice on five tasks; two testings are at least one week apart. Between pre- and post-testing, child is "taught" the task by each parent. Tasks include: Piaget's conservation of substance and test of "all and some" class inclusion; cartoon stories involving assessment of parent-child interaction; the "Fox and the Grapes" fable; and either the "glass houses" or "rolling stone" proverb.
Findings: Most of the "normal" parents used very clear language and concepts in teaching their children what was involved in the tasks. In two families this was not so, and in both, the child was having difficulty at school.
Duration: July 1966-October 1967.
Investigator(s): Loren R. Mosher, M.D., Assistant Professor of Psychiatry, Yale University Medical School, New Haven, Conn. 06519.
Cooperating group(s): Sociologic Research Unit, University of London, London, England; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Results available from Dr. Mosher.

22-DB-4 THE EFFECTS OF SOCIALIZATION ON COGNITIVE SKILLS

Subjects: Rural and suburban children residing in Baltimore County, Md.
Methods: Data are obtained through administration of a questionnaire, projective tests, classroom observations, and observation of parent-child interaction in the home.
Duration: September 1967-September 1969.
Investigator(s): Doris R. Entwisle, Ph.D., Associate Professor of Social Relations and Engineering Science, and Ellen Greenberger, Ph.D.,

Research Associate, Center for the Study of the Social Organization of Schools, Johns Hopkins University, Baltimore, Md. 21218.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Results will be published as reports of the Center for the Study of Schools and as journal articles.

22-DB-5 A STUDY OF SOME COGNITIVE AND NEUROLOGICAL DIFFERENCES IN BACKWARD AND NORMAL READERS

Purpose: To compare the intercorrelations between test scores on variables in a sample of backward and normal readers; to determine whether a link exists between reading disability and neurological impairment, at least in the case of some backward pupils.
Subjects: 50 backward readers, ages 9 to 10, with an I.Q. over 85; control group of normal readers matched on several variables.
Methods: Cognitive and neurological tests were administered to all subjects, and test scores were intercorrelated separately.
Findings: In the backward readers, reading age was strongly linked to auditory-visual integration and motor efficiency (Oseretsky Revised Test). Factor scores enabled the selection of pupils who were most likely to be backward due to neurological impairment.
Duration: September 1965-1967.
Investigator(s): K. Lovell, Ph.D., Reader in Education, and A. Gorton, M.A., Senior Lecturer in Education, University of Leeds, Leeds 2, England.
Publications: Submitted for publication.

22-DC-1 A FRESH APPROACH TO PRE-SCHOOL EDUCATION AND AN EVALUATION OF ITS EFFECTIVENESS

Purpose: To determine the effectiveness of a pre-school program based on teaching children how to learn.
Subjects: Two matched groups of 23 lower-middle class five-year-olds.
Methods: Experimental group was exposed to the "Learning to Learn Program", which utilizes game-like activities which motivate and enable the children to progress through the motor-perceptual-symbolic stages. Emphasis is on principles of cognitive development, and materials were developed in a sequential order based on the assumption that development proceeds from motor to perceptual to symbolic levels. Program centers on process of learning rather than on content. Control group received more traditional methods of pre-school training, and both groups were evaluated at end of year.
Findings: Experimental group made significantly larger gains than control group on 15 of the 17 developmental measures taken. Differences were large enough to be of practical as well as statistical significance.
Duration: September 1966-November 1967.
Investigator(s): Herbert Sprigle, Ph.D., Director, Learning to Learn School, Vernon Van De Riet, Ph.D., Assistant Professor, Department of Clinical Psychology, and Hani Van De Riet, Ph.D., University of Florida, Gainesville, Fla. 32601.
Cooperating group(s): Carnegie Corporation.
Publications: To be submitted for publication.

22-DC-2 A LONGITUDINAL ASSESSMENT OF PRE-SCHOOL CHILDREN IN HAPTIC LEARNING

Purpose: To study the development of haptic perception and the retention of learning in subjects who have completed an experimental program of planned learning activities involving haptic perception.
Subjects: Children, ages three to six.
Methods: Plywood forms of geometric design are presented haptically to subject who is asked to identify, describe, and draw each form, to match the forms haptically, and to select the representation of each form from among a group of drawings. Test is repeated with each child at intervals of 6 and 12 months. Data are examined in relation to chronological and mental age, time elapsed since completion of experimental program, and other factors.
Duration: December 1965-February 1968.
Investigator(s): Sister John Vianney Coyle, Ph.D. Candidate, and Sister Josephine Concannon, Professor, School of Education, Boston College, Chestnut Hill, Mass. 02167.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-DC-3 FACTORS INVOLVED IN EARLY SCHOOL LEARNING DIFFICULTIES

Purpose: To discover any statistically significant relationships between learning skills and neurological, psychological, environmental, or psychiatric status after three years of school; to determine the extent to which maturational lags in sensory, motor, social and intellectual areas shown in pre-schoolers may have been resolved by age eight or nine in the normal course of events at school and in the home.
Subjects: 64 nine-year-old children and their parents; control group.
Methods: One hundred forty-two children were given a complete battery of tests of general intelligence, manual and drawing skills, and projectives in the summer of 1964 prior to entering kindergarten. Those who showed pre-school difficulties in visual-motor coordination, figure-ground discrimination, and/or visual organization were followed up three years later. Comprehensive developmental history includes further psychological and achievement tests, neurological examination, administration of Purdue Perceptual Motor Survey and Frostig tests, an EEG, including photic and hyperventilation, and a stereotyped psychiatric interview with the child. In addition, the mother provides developmental and medical history of the child, is interviewed by the social worker, and answers two standard questionnaires regarding family interaction.
Duration: Summer 1964-January 1968.
Investigator(s): Anne Bell, B. Paed., M.A., Psychologist, and W. Wallace Grant, M.D., Director, Child Development Clinic, Children's Hospital, and Professor of Pediatrics, University of Manitoba, Winnipeg, Manitoba, Canada.
Cooperating group(s): Manitoba Hospital Commission; Department of Psychology, University of Manitoba.
Publications: Manitoba Psychologist 8:1, October 1966; conclusions will be published in appropriate professional journals.

22-DC-4 AN EXPERIMENTAL ANALYSIS OF LEARNING ABILITIES IN CULTURALLY DISADVANTAGED CHILDREN

Purpose: To devise methods of assessing learning abilities in culturally disadvantaged children; to provide training in techniques of mnemonic elaboration which have already been shown experimentally

to facilitate paired-associates learning; eventually, to adapt these techniques of facilitation of learning to instruction in the content of the primary school curriculum.
Subjects: Elementary school children, ages 4 to 11, from high and low socio-economic status levels.
Methods: Children are tested individually on a battery including Perceptual-Motor Learning-to-Learn, Perceptual-Motor Speed, Short-Term Memory, Attentional Ability, Free Recall, Serial Learning, Paired-Associate Learning, and Conceptual Learning, all of which are adapted for appropriate difficulty at each age level. Results should give age range throughout which each test yields reliable individual differences.
Duration: February 1967-September 1968.
Investigator(s): Arthur R. Jensen, Ph.D., Professor of Education and Research Psychologist, and William D. Rohwer, Jr., Ph.D., Assistant Professor of Education and Assistant Research Psychologist, School of Education, University of California, Berkeley, Calif. 94720. (Reported by Dr. Douglas A. Penfield, Assistant Research Educator, School of Education.)
Publications: Formal report to be issued at completion of project.

22-DD-1 RESPONSE PATTERNING OF MINIMALLY BRAIN-INJURED CHILDREN ON THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Purpose: To determine sources of variability and commonality of WISC sub-test scores of minimally brain-injured children; to determine if the response patterning of this group is distinctive and, if so, how this knowledge can be used in diagnosis and treatment.
Subjects: 250 children in classes for perceptually handicapped children in the Memphis City Schools with a mean age of 10.7 years and a standard deviation of 1.58.
Methods: Factor analysis of WISC sub-scales yielding both a principal components solution and a varimax rotation.
Duration: October 1967-February 1968.
Investigator(s): David C. Tanis, M.S., Coordinator of Research, Memphis City Schools, 2597 Avery Ave., Memphis, Tenn. 38112.
Publications: Results to be stored with Educational Resources Information Center (ERIC), Office of Education, U. S. Department of Health, Education, and Welfare; to be published in a professional journal.

22-DE-1 SENSORY-MOTOR EXPERIENCE AND CONCEPT FORMATION IN EARLY CHILDHOOD

Purpose: To determine whether there is a relationship between sensory-motor experience in early childhood and concept formation, and whether there are motoric and non-motoric modes that children employ in solving means-ends situations. Specifically, to test hypotheses that (1) the motorically handicapped will show a deficit of action concepts to object concepts in their concept repertoire, which is related to their restricted sensory-motor experience; (2) children will utilize, predominately, a motoric or non-motoric mode of dealing with means-ends situations; (3) the handicapped group will show deficits in tactile and motor perception.
Subjects: One group of motorically handicapped children, age four-and-one-half, and a control group.
Methods: Sensory-motor learning theories of Piaget and Hebb provide a theoretical basis for study. The two groups are compared for acquisition of simple action and object concepts. Two picture-type tests are constructed to test the first two hypotheses.
Duration: Not reported-Spring 1967.

Investigator(s): Robert F. Peck, Ph.D., Department of Educational Psychology, and Donald Melcer, School of Education, University of Texas, Austin, Tex. 78712.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-DE-2 EVALUATION OF CONCEPT ATTAINMENT IN THE PRE-SCHOOL CHILD

Purpose: To evaluate the level of concept attainment in pre-school children and to program individualized experiences in keeping with levels of development; to train inner-city mothers to carry out classroom observations and record and subsequently rate concept attainment.
Subjects: 750 children, ages three-and-one-half to four-and-one-half, from Project Headstart Child-Parent Development Center.
Methods: Mothers have been trained to observe and rate the children on Allerhand's Concept Attainment Rating Scale, based on various theories of concept formation. Teachers plan individualized experiences for the children based on their developmental levels, through various teacher training methods.
Duration: October 1966-January 1968.
Investigator(s): Melvin Allerhand, Ph.D., Director, Division of General Studies, and Carole Levy, M.S., Psychologist, Western Reserve University, Cleveland, Ohio 44106.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publications: Information available from Carole Levy.

22-DF-1 PROBLEM-SOLVING PROCESSES USED BY ELEMENTARY SCHOOL BOYS

Purpose: To investigate how elementary school children at different ages and at different levels of ability solve problems of specified logical structure when using different modes of presentation.
Subjects: Boys, ages 7 to 12.
Methods: In individual testing sessions subjects are given problems that they must solve by asking questions. After each question is asked, the corresponding information is given. The experimenter records the questions in sequence, and analyzes them by experimental and traditional methods. Variables subject to experimental manipulation are age, ability level, logical structure of the problems, mode of presentation, and grade level.
Duration: 1966-1970.
Investigator(s): H. J. A. Rimoldi, M.D., Ph.D., Professor of Psychology, and Director, Psychometric Laboratory, and Kenneth Vander Woude, Research Associate, Loyola University, Chicago, Ill. 60626.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-DF-2 A COMPARISON OF ACTIVITIES DESIGNED TO PROMOTE LOGICAL EXPRESSION IN CHILDREN

Purpose: To determine effectiveness of training programs which teach parents how to utilize reading materials or games as means for increasing logical expression in their children.
Subjects: 42 Negro families with a mother or mother-substitute and one five-year-old child.

Methods: Families were randomly divided into two experimental and one control group. Experimental groups used either reading materials or games with weekly assistance of investigator, who served as a teaching model for the parent. Pre- and post-test data include verbal and non-verbal measures of logical expression from the children; verbal reports from parents on child guidance techniques which they would use in specified behavioral situations; and observational check lists of the teaching style of the parent in a standard situation.
Duration: September 1966-September 1967.
Investigator(s): Therry N. Deal, Ph.D., Assistant Professor of Child Development, School of Home Economics, University of Georgia, Athens, Ga. 30601. (Reported by Elizabeth T. Sheerer, Ph.D., Head, Department of Family Development, School of Home Economics.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Results available through Research and Development Center, University of Georgia; journal publication planned.

22-DG-1 PERCEPTUAL DEVELOPMENT IN YOUNG CHILDREN

Purpose: To develop visual, auditory, tactual, kinesthetic, and other instruments for assessing perceptual development in the age range of three to nine years; eventually, to define a set of measurement operations by which pre-school development may be meaningfully related to early school progress.
Subjects: 15 children at each of seven age levels, attending the University Schools.
Methods: Pre-recorded test materials are administered to groups where possible, with increasingly smaller groups at the lower end of the age range. Instruments used relate to current major theories of cognitive development.
Duration: September 1967-June 1968.
Investigator(s): Edward Gotts, Ph.D., Assistant Professor and Research Coordinator, Institute for Child Study, University Schools, Indiana University, Bloomington, Ind. 47401. (Reported by William W. Lynch, Ph.D., Chairman, Department of Educational Psychology, School of Education, Indiana University.)
Publications: Publication planned.

22-DG-2 DEVELOPMENT OF ATTENTIONAL PROCESSES

Purpose: To determine whether there is a change with age in the extent to which an individual can ignore task-relevant information and can take in task-relevant information when stimulation is complex, and, if so, to determine whether these changes depend upon development of the ability to make use of a preparatory set; to investigate role of sense-organ orientation in the utilization of preparatory set in auditory perception.
Subjects: Children, ages 5 to 14; adults, ages 59-84.
Methods: Subject listens to taped auditory messages in which two voices speak simultaneously. Subject is instructed either to select one voice or to report them successively with order specified.
Findings: The children improved in selective listening; improvement did not depend upon increasing utilization of preparatory set, although the availability of a preparatory signal did improve selective listening at all the ages studied. The utility of the preparatory signal did not depend upon ear orientation, but appeared to be central.

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Duration: September 1964-August 1967.
Investigator(s): Eleanor E. Maccoby, Ph.D., Professor of Psychology, and Director, Laboratory of Human Development, Stanford University, Stanford, Calif. 94305.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Monograph of the Society for Research in Child Development 112:32:4, 1967; in Advances in Child Development and Behavior, Vol. 3, Lipsitt and Spiker (Eds.), 1967.

22-DG-3 INTERPERSONAL PERCEPTION OF PRE-SCHOOL CHILDREN

Purpose: To investigate at what age the pre-school child becomes capable of perceiving the needs and feelings of other people; to develop ways of helping him to become increasingly aware of the world of the other so that he can use this information in his social interactions.
Subjects: 20 three- and four-year-old children of middle class professional parents, enrolled in the Carnegie-Mellon Child Development Laboratory.
Methods: Several techniques have been utilized to measure the child's awareness of the other person's perspective, as in ability to select appropriate gifts for familiar people, and awareness of how other children would feel as presented in a hypothetical situation. Techniques will be tested for validity by correlating them with teachers' ratings of social perceptiveness and evidence of such perceptiveness in a behavioral observation made of each child. Different approaches will be used to increase the child's awareness of the other's point of view and to help him apply it to interpersonal situations (e.g., teachers suggest that children tell one another how they feel during disagreements; parents are encouraged to listen to the child's point of view and share theirs with him, etc.), and change will be measured.
Findings: Tentative findings indicate that middle class children as young as three are quite accurate in their perception of how other children feel in various situations.
Duration: September 1967-September 1968.
Investigator(s): Helene Borke, Ph.D., Assistant Professor of Child Development and Psychology, Carnegie-Mellon University, Pittsburgh, Pa. 15213.
Publications: Plan to publish in an appropriate journal.

22-DH-1 PERCEPTUAL VERSUS MOVEMENT RESPONSES IN THE ACQUISITION OF VERBAL SYMBOLIC CONCEPTS BY DEPRIVED CHILDREN

Purpose: To contrast efficiency of verbal concept learning in disadvantaged children when taught through perceptual means with that taught through use of music or children's own highly differentiated movement responses.
Subjects: 156 four-year-old Negro children enrolled in a summer pre-kindergarten program.
Methods: Subjects were divided into perceptual, movement, and control groups. Perceptual group, taught by Montessori methods, and movement group were taught the same series of symbolic verbal concepts using either perceptual or movement responses. Children received 20 minutes of training three times a week for four weeks.

Findings: Both treatment groups were significantly better in verbal concept understanding and use than the control group; movement group was significantly better than the perceptual.
Duration: Summer 1967-completed.
Investigator(s): Marcia Guttentag, Ph.D., Assistant Professor of Psychology, Queens College, Flushing, N. Y. 11367.
Cooperating group(s): New Haven, Conn. Project Headstart; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Paper presented at Eastern Psychological Association Meeting, Washington, D. C., April 1968; publication planned.

Personality

22-EA-1 AN EXPLORATORY INVESTIGATION OF CERTAIN PERSONALITY CHARACTERISTICS AT GRADES SEVEN AND TWELVE IN SELECTED SCHOOLS

Purpose: To identify certain personality characteristics of students in specified school environments.
Subjects: Students in grades 7 through 12 in four secondary schools in New York State.
Methods: California Psychological Inventory was administered to the same students in seventh and twelfth grades, and results were compared.
Findings: Two of the four schools showed more change than stability. Significant differences between high- and low-ranked groups at grade seven increased over the five-year period in three of the four schools.
Duration: January 1963-June 1967.
Investigator(s): F. Douglas Bowles, Ed.D., Associate Professor of Education, State University of New York, Oneonta, N. Y. 13820.
Cooperating group(s): Quality Measurement Project, New York State Department of Education.
Publications: Plan to publish in psychological and sociological journals, 1968.

22-EA-2 EFFECT OF FETAL ACTIVITY ON APPREHENSION AND AGGRESSION

Purpose: To study the relationship between fetal activity, and social apprehension and peer aggression when mother-child interaction variables are controlled.
Subjects: 80 expectant mothers and their children.
Methods: Mothers are selected on basis of prenatal care, socio-economic background, intact homes, race, and non-smoking. Fetal activity is recorded by mothers for the last two-and-one-half months of pregnancy. Following the birth of the infants, several measurements will be taken, including activity ratings of the infants, Gesell Developmental Schedules, Social Apprehension and Peer Aggression Scales, Overt Peer Aggression, Love-Hostility and Acceptance-Rejection Scales, and Mother-Child Interaction Test (measuring over-protectiveness). Kendall rank-order correlations will be obtained for each sex between fetal activity and social apprehension, and between fetal activity and two measures of peer aggression, with mother-child interaction variables held constant.
Duration: January 1967-1971.

Investigator(s): C. Etta Walters, Ph.D., Associate Professor, Institute of Human Development, and James Walters, Ph.D., Professor and Head, Home and Family Life, Florida State University, Tallahassee, Fla. 32306.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-EA-3 THE INFANT'S REACTIONS TO THE STRANGER

Purpose: To arrive at a more precise and complete description of the infant's reactions when he meets a person whom he has never seen before; to determine the psychological nature and meaning of those reactions.
Subjects: Normal infants in Montreal, ages 6 to 15 months.
Methods: Observation is made of infant's motor, visual, vocal, and expressive reactions to an experimenter who behaves according to a predetermined schedule. For the purpose of interpreting those reactions, there is a tentative assessment of the infant's cognitive development, based on Piaget's genetic model, and his relationship to his mother.
Findings: Preliminary findings indicate that negative reactions to the stranger do not seem to be a general phenomenon among infants, at least not until about the end of the first year.
Duration: June 1966-1972.
Investigator(s): Thérèse Gouin Décarie, D.Ph., Professor, Institute of Psychology, University of Montreal, Montreal 3, Quebec, Canada.
Cooperating group(s): The Canada Council.
Publications: *Canadian Psychologist* (*Psychologie Canadienne*) 8-a:2:157, April 1967.

22-EA-4 PSYCHOENDOCRINE STUDIES OF ADOLESCENT BEHAVIOR

Purpose: To study the correlation of endocrine function with behavior and social function in adolescent males.
Subjects: Five groups of adolescent males: acting-out aggressive; acting-out aggressive with brain damage; passive-withdrawn; passive-withdrawn with brain damage; normal with regard to each of these conditions.
Methods: Three-day pools of 24-hour urine samples are collected periodically over three months, including time of admission; these are processed and stored with subsequent analysis for 17-hydroxycorticosteroid, epinephrine, norepinephrine, aldosterone, androgen, estrogen, and pepsinogen. Concomitantly, complete medical examination, interview, life history, projective testing, and daily observations are performed in order to provide social and behavioral data for correlation with identified endocrine patterns.
Findings: Data on 55 youths studied to date suggest increased lability of endocrine functions as compared to older populations, exaggerated patterns of excretion in either direction in adolescents with brain damage, and correlations between behavioral styles during periods of social stress and patterns of endocrine function.
Duration: 1962-1968.
Investigator(s): Jacob R. Fishman, M.D., Center for Mental Health, Howard University College of Medicine, Washington, D. C. 20001.
Cooperating group(s): U. S. Army.

22-EB-1 DEVELOPMENT STUDY OF THE SELF-IMAGE

Purpose: To determine whether it is possible to differentiate stages in the development of the self-image.
Subjects: Children, ages 6 to 12.
Methods: Intensive interviews are conducted to determine conceptions of the self in present and future; change and development of self-values; changing self-picture which the individual desires to project to the world; emergence of self-awareness and self-consciousness; changes in degree of preoccupation with the self; emerging clarification of the distinction between committed and idealized images; content of the present, committed, and idealized images; development of the superego emphasizing the content of moral judgments about the self; changing sensitivity to external evaluation; development of ego-extensions; stability of the self-image at different stages; and other aspects of the self-image.
Duration: Not reported.
Investigator(s): Morris Rosenberg, Ph.D., Social Science Analyst, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Chevy Chase, Md. 20203.

22-EB-2 SELF-EVALUATION, BIRTH ORDER, AND PESSIMISM

Purpose: To investigate some of the supposed determiners of self-confidence.
Subjects: Boys, ages 7, 12, and college-age.
Methods: Each subject works at a task with experimentally controlled feedback of information about the rate of improvement in his performance. He periodically estimates his probability of success in terms of his chances of driving his performance up to a fixed "required" level at least once in the 10 trials allowed.
Findings: Optimistic attitude, i.e., if the reward for doing a good job is valuable to me, then I am more likely to succeed, is characteristic of later-born, low-self-evaluating college students, and to a lesser degree, of similar 12-year-old boys. Pessimistic attitude is characteristic of all other groups.
Duration: September 1965-continuing.
Investigator(s): James C. Diggory, Ph.D., Professor and Chairman, Department of Psychology, Chatham College, Pittsburgh, Pa. 15232.
Cooperating group(s): Pittsburgh parochial schools.
Publications: Paper presented at Eastern Psychological Association Meeting, Washington, D. C., April 1968.

22-EB-3 RACIAL DIFFERENCES IN EGO FUNCTIONS RELEVANT TO ACADEMIC ACHIEVEMENT

Purpose: To explore the hypotheses that (1) the ego functions of sense of personal control and willingness to delay gratification are significantly related to academic achievement; and (2) Negro children score significantly lower on measures of both ego function variables.
Subjects: 237 eighth graders (182 white, 55 Negro) and 321 eleventh graders (288 white, 33 Negro).
Methods: All subjects were given two seven-item scales, one measuring sense of personal control and the other, willingness to delay impulse gratification. Three sets of analyses of variance and covariance (with I.Q. as covariate) were performed: (1) sex and race as independent

variables, academic grade point average (GPA) as a dependent variable; (2) ego function variables as independent, GPA as dependent variable; and (3) sex and race independent, ego function variables dependent.
Findings: Both hypotheses were supported. However, the ego function variables appeared to influence academic achievement largely through their association with intelligence. The racial differences on the ego function variables were interpreted as contributing to a vicious cycle, with the Negro child's intellectual and psychological handicaps interacting.
Duration: April-October 1967.
Investigator(s): Elise E. Lessing, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: Report to be published in professional journal.

22-EB-4 EGO DEVELOPMENT IN SOCIALLY DISADVANTAGED FOUR-YEAR-OLDS

Purpose: To explore the spectrum of salient ego functions for four-year-olds in a socially disadvantaged area; to attempt clinical assessment for use in nursery school intervention; to relate children's personality functions to family and community characteristics.
Subjects: 30 male children enrolled in a research nursery school for socially disadvantaged youngsters.
Methods: The children were interviewed and observed by two child psychiatrists. Clinical observations and standardized techniques were utilized to evaluate ego functions of various kinds.
Findings: It was found that organization and content of play were important factors in determining quality of ego functioning; that verbal facility was not as useful a predictor; that capacities for interpersonal relationships are also good indicators of functioning.
Duration: May 1966-July 1968.
Investigator(s): Jay G. Hirsch, M.D., Chief, Division of Preventive Psychiatry, Institute for Juvenile Research, 232 E. Ohio St.; and Gene H. Borowitz, M.D., Associate Professor of Psychiatry, University of Illinois College of Medicine, Chicago, Ill. 60612.
Cooperating group(s): Kenneth F. Montgomery Foundation.
Publications: Reports presented at Meeting of Society for Research in Child Development, March 1967, and at American Orthopsychiatric Association Meeting, March 1968; articles to be published in journals.

22-EC-1 ANIMAL SYMBOLISM IN CHILDHOOD

Purpose: To investigate the animal choices of children in an effort to develop a normative scale to be used in psychodiagnostic interviews.
Subjects: 200 children each, equally divided by sex, from kindergarten through grade 12, in a school district of a small New England city.
Methods: Each class was interviewed. The children were asked to write down the name of the animal they would most like to be, as well as the name of the animal they would dislike being. Results are analyzed in relationship to age and sex.
Duration: January 1967-January 1968.
Investigator(s): Raymond Sobel, M.D., Professor and Director, Division of Child Psychiatry, Dartmouth Medical School, Hanover, N. H. 03755.

22-ED-1 EFFECTS ON AGGRESSION OF FILMED VS. LIVE SANCTIONS

Purpose: To assess: (1) the role of co-observer's differential sanctions on subsequent performance of aggression; (2) the role of expectancies in determining the performance of film-mediated aggression; and (3) the difference in the aggressive performance between males and females.
Subjects: 42 boys and 42 girls, ages 60 to 105 months, with a mean age of 84 months.
Methods: Each child was individually shown a film containing an adult male behaving aggressively. A male co-observer provided either positive, negative, or no evaluation of this performance during its presentation. The co-observer subsequently accompanied half of the subjects to an experimental room where their imitative behavior was scored for a 15-minute period.
Findings: (1) Co-observer's positive, negative, or neutral sanctions have differential effects on subsequent performance of aggression; (2) differential effects occur only when the individual sanctioning the behavior remains with the children during performance opportunities; (3) girls perform less aggressively than boys, but the relative effects of various sanctions are the same between sexes.
Duration: September 1964-completed.
Investigator(s): David J. Hicks, Ph.D., Associate Professor of Psychology, Chico State College, Chico, Calif. 95926.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Submitted to Child Development.

22-EE-1 HYPNOTIC SUSCEPTIBILITY IN FRATERNAL AND IDENTICAL TWINS, AND IN CHILDREN AND THEIR PARENTS

Purpose: To compare hypnotic susceptibility between sets of identical and fraternal twins in an effort to isolate genetic and environmental factors in the development of responsiveness to hypnosis; to investigate similar factors in children and their parents, with the addition of relating the child's score to his parents' in terms of like-sex, identification, etc.
Subjects: Volunteer families from the community, specifically the Mothers of Twins Club, which provides a large part of the twin sample.
Methods: Stanford Hypnotic Susceptibility Scale, Form A, is administered and information obtained on age, sex, education, occupation, and birth order of family members. Objective hypnotic susceptibility scores are compared.
Duration: June 1966-June 1969.
Investigator(s): Ernest R. Hilgard, Ph.D., Professor of Psychology, Stanford University, Stanford, Calif. 94305. (Reported by Arlene Morgan, Staff Associate, Laboratory of Hypnosis Research, Department of Psychology.)
Publications: Plan to publish in 1969.

22-EF-1 DETERMINANTS OF EARLY PLAY BEHAVIOR

Purpose: To explore the roles of anxiety and the desire for competence in determining children's play behavior.
Subjects: Children, ages 5 to 10.
Methods: Children are observed at play in school and at the doctor's office.
Duration: September 1967-August 1968.

Investigator(s): J. Barnard Gilmore, Ph.D., Associate Professor of Psychology, University of Waterloo, Waterloo, Ontario, Canada.
Cooperating group(s): The Canada Council.

22-EG-1 ANIMAL FIGURES IN DREAMS: AGE, SEX, AND CULTURAL DIFFERENCES

Purpose: To discover the type and frequency of various animal figures in several samples of dreamers.
Subjects: 520 dreams from 457 American children; 4,000 dreams from 801 American adults; and 554 dreams from 247 cross-cultural adults, including Australian aborigines, South Pacific and North American Indians.
Methods: Dreams were analyzed for manifest content, and types of animals present were tallied. Dreams containing animals were also compared with those in which no animals appeared.
Findings: Four-year-old children dream about animals 61 percent of the time, and adults seven to eight percent. Between these age extremes there is a rank order correlation of +1.00 between chronological age and the frequency of animal dreams. Children dream of different animals than adults. Sex and cultural differences are present in the type of animals dreamed about.
Duration: Not reported.
Investigator(s): Robert L. Van de Castle, Ph.D., Associate Professor of Psychology, Department of Psychiatry, University of North Carolina Medical School, Chapel Hill, N. C. 27514.
Publications: Monograph planned in Journal of Consulting Psychology.

Social

22-FC-1 SMOKING EDUCATION AND EVALUATION PROGRAM

Purpose: To test hypothesis that certain attitudes and knowledge held by school children about smoking are predictive of actual smoking behavior; to determine the effects of an intensive program in smoking information on smoking attitudes, beliefs, and practices.
Subjects: Children in kindergarten through high school in two separate matched school districts of 3,000 students each; control groups of children in two additional school districts.
Methods: Students in one district are given an intensive educational program designed to increase knowledge about smoking, change attitudes and beliefs in a direction unfavorable to smoking, and decrease actual smoking behavior. A questionnaire will be administered before, during, and after the program. Corollary studies will include a survey of attitudes, beliefs, and smoking behavior of teachers in the districts; a study of sub-groups of students in relation to their ability to delay gratification, their habits of arousal-seeking, and their mode of reinforcement (external versus internal); and a check of the reliability of responses on the questionnaire, especially in the primary grades.
Duration: July 1966-July 1971.
Investigator(s): Richard L. Grant, M.D., Instructor in Psychiatry, University of Oregon Medical School, Portland, Ore. 97201.
Cooperating group(s): Tuberculosis and Health Association of Oregon; Oregon Heart Association; American Cancer Society, Oregon Division; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Cigarette Smoking and School Children: The Beginning of a Longitudinal Study, Richard L. Grant and Morris Weitman. Chicago: Aldine Publishing Company, in press, 1967.

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22-FD-1 IMITATION IN CHILDREN AS A FUNCTION OF INTERPERSONAL ATTRACTION

Purpose: To determine (1) whether the relationship between attitude similarity and attraction to another person holds true for young children as it does for older children and adults; and (2) whether differences in attitude similarity (and therefore interpersonal attraction) affect the degree of the child's imitation of the other person.
Subjects: 32 children, ages four to five-and-one-half, attending the Washington State University nursery school.
Methods: Children are individually introduced to an adult female who is the model. Examiner explains that he wants to find out what things people like, and that he will first ask the child and then ask the model about the same things. He then asks 12 questions such as, "Is it all right for children to cry at nursery school?" and "Do you like ice cream?" The model agrees with the attitudes expressed by half the subjects, and disagrees with the remainder. She then leaves, while the Examiner determines the child's attraction toward her. The model returns to "play with some things," then the child is given a turn to play. His imitation of four acceptable and four unacceptable things the model did is noted, as well as his use of four things the model did not use.
Findings: Means indicate higher interpersonal attraction and higher imitation in the 100 percent agreement group.
Duration: April-June 1967.
Investigator(s): Marshall L. Hamilton, Ph.D., Assistant Professor, Department of Child and Family Studies, Washington State University, Pullman, Wash. 99163.
Publications: If results are significant, plan to submit to *Journal of Personality and Social Psychology*.

22-FD-2 MODELING AS A FACTOR IN THE INTERNALIZATION OF SOCIAL STANDARDS

Purpose: To test the hypothesis that subjects can abide by behavioral standards that they have observed or have had imposed on them without having the "investment in" or "commitment to" those standards that is characterized by internalized standards.
Subjects: 29 boys and 25 girls, ages 8-6 to 10-6, in third and fourth grades in the Tenafly, N. J. public schools.
Methods: Children were first exposed to a model who rewarded and punished herself for her performance on a particular task; then, under conditions of non-surveillance, the children were given an opportunity to reward and punish themselves for their performance on the same task. After a series of trials, a second person entered and, as the subject continued to perform the task, meted out either stricter or more lenient rewards or punishments to the child. Finally, the children were given a second opportunity to perform alone and to self-reinforce or punish their own performance.
Findings: Under-punishment and over-reward tended to result in decreased rule adherence, while over-punishment and under-reward showed no change or slight decreases in rule adherence.
Duration: Spring-Fall 1967.
Investigator(s): Harvey A. Hornstein, Ph.D., Assistant Professor of Psychology, and Peter Gumpert, Ph.D., Assistant Professor, Teachers College, Columbia University, New York, N. Y. 10027.
Cooperating group(s): National Science Foundation.
Publications: Indefinite.

SPECIAL GROUPS OF CHILDREN

Physically Handicapped

22-GC-1 THE EFFECT OF CYSTIC FIBROSIS ON THE SOCIAL FUNCTIONING OF ADOLESCENT AND YOUNG ADULT PATIENTS

Purpose: To evaluate (1) the social functioning of adolescent and young adult cystic fibrosis patients, and (2) the resources available to and the kinds of help needed for those patients who seem to have educational, economic, and social relationship difficulties that conflict with their overall future potential.
Subjects: 12 adolescent cystic fibrosis patients.
Methods: Interviews with subjects are recorded. Material is examined and analyzed to determine current problems, universal characteristics, and future needs. Model of the normal adolescent role developed by Erik H. Erikson is utilized to compare cystic fibrosis patients to the normal adolescent and young adult.
Duration: Not reported-1968.
Investigator(s): David W. Callagy and Thomas G. Gallagher, Social Work Department, Clinical Center, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

22-GC-2 NEUROLOGIC AFFECTATIONS IN APHASIA

Purpose: To structure a kinesthetic method to develop verbal reactions in aphasia.
Subjects: 10 children, ages 6 to 12, at various levels of aphasian syndrome.
Methods: Use of speech methods associated with training of the deaf.
Findings: Motor training is closely associative in speech training. An involuntary verbal reaction is desirable.
Duration: December 1966-December 1967.
Investigator(s): Ann Reid, Ph.D., Coordinator of Special Education, Oklahoma City Public Schools, 1134 N.W. 8th St., Oklahoma City, Okla. 73106.
Cooperating group(s): Child's Study Center, Oklahoma City.
Publications: Plan to publish.

22-GC-3 INSTRUMENTATION FOR NASALITY AND ORAL COORDINATION

Purpose: To broaden the existing theoretical construct relative to examining relationships between speech competency and structural impairment in cleft palate individuals; to develop instrumentation to measure nasality and oral coordination.
Subjects: Children with hypernasal voice and cleft palate.
Methods: Development of the necessary electronic instrumentation to measure nasality and oral coordination.

Duration: January 1967-December 1968.
Investigator(s): Samuel G. Fletcher, Ph.D., Professor and Head, Department of Audiology-Speech Pathology, Utah State University, Logan, Utah 84321.
Cooperating group(s): Easter Seal Research Foundation; Cleft Palate Team at Primary Children's Hospital.

22-GC-4 DEVELOPMENT OF TESTING PROCEDURES FOR ASSESSING COORDINATION DEFECTS OF CHILDREN WITH MINIMAL BRAIN DYSFUNCTION

Purpose: To refine the assessment of coordination deficits usually considered as neurological "soft signs".
Subjects: 60 children diagnosed as having central nervous system dysfunction; 60 children without such a diagnosis.
Methods: Comparison of normal subjects and those with central nervous system dysfunction on the Diagnostic Testing Instrument, which is a compilation of those procedures described in neurological literature as tests for "soft signs".
Findings: Several of the "soft sign" indices in use by neurologists do not appear to differentiate the two groups, while others definitely do.
Duration: September 1967-June 1968.
Investigator(s): George DeHaven, B.S., R.P.T., Chief Physical Therapist, and John B. Mordock, Ph.D., Coordinator of Research, The Devereux Foundation, Institute for Research and Training, Devon, Pa. 19333.
Publications: Findings to be presented at Annual Meetings of American Physical Therapy Association and American Psychiatric Association; also plan to publish in appropriate journals.

22-GC-5 EVALUATION OF TWO MEASURES OF SPEECH HEARING FOR HEARING-IMPAIRED CHILDREN

Purpose: To assess the function of hearing-impaired children with the Threshold by Identification of Pictures test and the Discrimination by Identification of Pictures test.
Subjects: 200 peripherally hearing-impaired children, ages 5 to 12.
Methods: The TIP and DIP materials are presented using taped stimuli following standard field presentation techniques. Data for discrimination using the DIP are obtained at levels of 5dB, 10dB, and 25dB above threshold, as established with the TIP test. Comparisons of three forms of the DIP and two forms of the TIP will be made, and results compared to a normative study completed in 1966.
Duration: June 1966-June 1968.
Investigator(s): George S. Haspiel, Ph.D., Assistant Director, and Bruce M. Siegenthaler, Ph.D., Director, Speech and Hearing Clinic, Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to a national journal in communication disorders and presented at a convention of the American Speech and Hearing Association.

22-GC-6 INVESTIGATION OF INTELLIGENCE OF EPILEPTIC PATIENTS AND THEIR FAMILIES

Purpose: To assess the differences between the intellectual functioning of the epileptic and members of his family; to evaluate the relationship between electroencephalographic and intellectual functioning in the epileptic and in his family.
Subjects: 20 children referred to the Michigan Epilepsy Center for diagnostic evaluation or recommendations because of suspected seizures or an actual seizure disorder, and their families. Only those families were chosen in which all siblings and parents agreed to cooperate in the study assessment procedures.
Methods: Either the Stanford-Binet, WAIS or WISC (depending upon age), and EEG's were administered to all members of the family, including the patient. In addition, parents were administered the Manifest Anxiety, Shaw Pseudo-Neurological, and Hovey Brain Damage Scales, as well as the Parental Attitude Research Instrument.
Findings: Preliminary findings indicate that in those cases with a confirmed diagnosis of convulsive disorder, the epileptic child falls, on the average, from 10 to 15 points below the mean I.Q. of the remainder of the members of his family. In cases of suspected convulsive disorder, only 50 percent of the subjects had lower I.Q.'s than the mean I.Q.'s of their families.
Duration: January 1966-continuing.
Investigator(s): Ernst A. Rodin, M.D., Director of Medical Research, and Melvin L. Schwartz, Ph.D., Chief of Neuropsychology, Michigan Epilepsy Center, 10 Peterboro, Detroit, Mich. 48201.

22-GC-7 AN INTEREST INVENTORY FOR THE BLIND

Purpose: To develop an interest inventory made up entirely of items which form part of the jobs or recreational activities of legally blind persons, beginning with the early teens.
Subjects: Blind teenagers who are beginning to plan for post-high school years.
Methods: Test to be administered has three sections: activities suited to persons of limited ability and/or education, activities suited to those in or considering professional training, and activities in art, music, and outdoor fields which offer limited opportunity but may represent intense interests for blind people. Items have been selected chiefly from job descriptions of subjects of study because they were working in the professions or in clerical, industrial, and service jobs. Items have been studied and equated for level of difficulty and refined to the most effective phrasing. Norms will be obtained by administering the test to persons already in the fields covered. Test may be administered in whole, or in sections.
Duration: September 1966-September 1968.
Investigator(s): Mary K. Bauman, M.S., Director, Personnel Research Center, 1604 Spruce St., Philadelphia, Pa. 19103.
Cooperating group(s): Committee for Research on Problems Related to Blindness; The Rauch Foundation.
Publications: To be published in either New Outlook for the Blind or International Journal for the Education of the Blind.

22-GE-1 A HOME TEACHING PROGRAM FOR PARENTS OF VERY YOUNG DEAF CHILDREN

Purpose: To demonstrate value of a parent-oriented program for deaf children in which a model home facility is used by trained teachers of the deaf to show parents the ways in which the daily life activities in the home can be the source of stimulation for the child in his use of hearing and development of language.
Subjects: 56 families with deaf children under age three.
Methods: Following medical, audiological, psychological, and social service evaluation, parents enroll with their child in a weekly instruction program geared toward helping them to understand the handicap of deafness and to help the child become accustomed at an early age to utilizing residual hearing and to attempting to communicate through development of aural and oral language. Hearing aid use is begun almost immediately, and audiological maintenance is carried on with instruction program. Parents meet once monthly at night for group sessions led by two clinical psychologists, and one night a month for instruction series of lectures by audiologists, teachers, psychologists, physicians, etc.
Duration: February 1966-January 1969.
Investigator(s): Freeman McConnell, Ph.D., Professor of Audiology, and Director, Bill Wilkerson Hearing and Speech Center, Vanderbilt University, Nashville, Tenn. 37212.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Plan to publish parents' manuals on communication skills by end of 1968; additional articles to appear in professional journals.

22-GE-2 AMELIORATION OF THE MINIMAL BRAIN DAMAGE SYNDROME

Purpose: To study whether a group discussion program with mothers of newborns with a high incidence of minimal brain damage will help reduce the incidence of the behavioral and neurological manifestations of this syndrome.
Subjects: 100 premature infants, with birthweight of two-and-one-half to four pounds; their families.
Methods: The Parental Attitude Research Instrument and a socio-economic scale are employed to determine assignment of mothers to a group discussion program held periodically during infants' first year. Infants are studied for neurological and behavioral development and followed up at six months, one, two, four, and five years with neurological examinations, psychological tests of intelligence, perceptual, and perceptual-motor function, and with electroencephalograms.
Duration: April 1967-April 1972.
Investigator(s): Jack Arbit, Ph.D., Associate Professor of Psychology, and George K. Yacorzynski, Ph.D., Professor of Psychology, Department of Neurology and Psychiatry, Northwestern University Medical School, Chicago 60611; Beatrice Tucker, M.D., Medical Director, Chicago Maternity Center, Chicago, Ill.
Cooperating group(s): Chicago Wesley Memorial Hospital; Office of Research and Demonstrations, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Plan to publish in appropriate pediatric, neurological, and psychological journals.

Mentally Retarded

22-HA-1 THE TOTAL CARE OF BLIND RETARDED CHILDREN

Purpose: To study the incidence of a double handicap of blindness and retardation; to evaluate the associated behavioral abnormalities and their relation to lack of occupation, and the need for adequate stimulus in programming for these children.
Subjects: Blind retarded children known to the Department of Mental Health and the Royal Children's Hospital, Melbourne.
Methods: Evaluation of histories; physical and psychological examinations.
Duration: 1962-1966.
Investigator(s): David Pitt, M.D., Pediatrician, Children's Cottages Training Centre, Kew, E.4, Victoria, Australia.
Publications: Submitted to Medical Journal of Australia.

22-HB-1 A SCIENTIFIC STUDY OF ASSESSMENT PROCEDURES AND THE ESTABLISHMENT OF A THERAPEUTIC PROGRAM FOR TRAINABLE RETARDED CHILDREN

Purpose: To assess current methods of evaluating the retarded child, with a view to therapeutic programming in a pre-school unit for trainable retarded children, the eventual goal being to establish a program which could be extended into the community.
Subjects: 10-14 pre-school trainable retarded children, ages 4 to 6, functioning at a 2- to 2 1/2-year level; their parents.
Methods: Development of systematized methods for collecting data concerning the use of a team process in assessing and establishing a pre-school therapeutic program.
Findings: Progress found in subjects which exceeds that expected had they not participated.
Duration: July 1967-not reported.
Investigator(s): Frederick W. Lundell, M.D., Psychiatrist and Director, and Mrs. R. Lippsett, M.S.W., Ph.D., Administrative Coordinator, Mental Assessment and Guidance Clinic, Montreal Children's Hospital, Montreal 25, Quebec, Canada.
Cooperating group(s): Quebec Association for Retarded Children; Canadian Association for Retarded Children.
Publications: Several preliminary papers have been published and are available on request.

22-HC-1 THE IDENTIFICATION OF BEHAVIORAL AGGRESSION IN THE MENTALLY RETARDED

Purpose: To identify behavioral aggression in the retardate.
Subjects: 60 mentally retarded male adolescents with I.Q.'s above 50 and a modal C.A. of 14 years attending a summer camp; 36 institutionalized male retardates with I.Q.'s between 40 and 50.
Methods: Flanagan's Critical Incident Technique and the Sonoma Checklist were used by five raters to assess behavioral aggression over a period of five weeks.
Findings: 46 items on the Sonoma Checklist differentiated at a statistically significant level those children identified as behaviorally aggressive.

Duration: June 1966-October 1967.
Investigator(s): George Domino, Ph.D., Assistant Professor of Psychology, Fordham University, Bronx, N. Y. 10458.
Publications: Training School Bulletin, 1967.

22-HC-2 EFFECTS OF A MODIFIED ADMINISTRATION OF THE BENDER-GESTALT TO MENTAL RETARDATES

Purpose: To ascertain the degree of improvement in visual-motor reproduction with decrease in distraction.
Subjects: Mentally retarded children.
Methods: Bender-Gestalt is administered in AB-BA design under experimental and controlled reproduction conditions; Peabody Picture Vocabulary and Frostig tests are also given.
Duration: September 1966-June 1967.
Investigator(s): Robert M. Allen, Ph.D., Professor of Psychology, University of Miami, Coral Gables, Fla. 33124.
Cooperating group(s): Hope School; Sunland Training Center; Child Development Center, Department of Pediatrics, University of Miami.
Publications: To be submitted for publication.

22-HE-1 CONTEXTUAL CUES IN THE VERBAL LEARNING OF RETARDATES AND NORMAL CHILDREN

Purpose: To investigate the conditions under which stimuli become functional in verbal learning tasks; to compare retarded and normal individuals with respect to their use of various relevant cues.
Subjects: Mentally retarded adolescents and normal elementary school children.
Findings: The effect of context cues is dependent upon the meaningfulness or discriminability of the primary stimuli. Retardates are less likely to effectively employ context cues in verbal learning situations.
Duration: June 1966-May 1968.
Investigator(s): Alfred A. Baumeister, Ph.D., Associate Professor of Psychology, University of Alabama, University, Ala. 35486.
Cooperating group(s): Partlow State School and Hospital; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Articles submitted to psychological journals, 1967.

22-HE-2 ODDITY LEARNING IN RETARDATES

Purpose: To determine the effect of double responding (touching or nearly touching the stimulus before responding to a remote site) under the condition of Stimulus-Response discontiguity; to compare the performance of the group instructed to double respond with that of a group learning under S-R contiguity and with another learning under S-R discontiguity but without double responding.
Subjects: 36 students from "slow learners" classes of the seventh, eighth, and ninth grades of Francis Junior High School, Washington, D. C., divided into three groups of 12 subjects each and matched for M.A. as determined by the Peabody Picture Vocabulary test; M.A.'s ranged from 7-8 to 10-8, with a mean M.A. of 9-70, C.A.'s, from 13-11 to 16-5, with a mean C.A. of 14.99.

Methods: Subjects were presented with a three-choice oddity discrimination task.
Findings: The group instructed to double respond learned the problem most efficiently, as measured by mean trials and errors to criterion. The group presented the problem under the control condition of S-R contiguity learned more efficiently than the S-R discontiguity group, but not as well as the double responding group. The differences among the three groups were all statistically significant. Findings indicate that the technique of Double Responding is effective in promoting proficient discrimination learning under conditions of S-R discontiguity.
Duration: November-December 1966.
Investigator(s): Richard A. Wunderlich, Ph.D., Associate Professor of Psychology, Catholic University, Washington, D. C. 20017.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Plan to publish in appropriate psychological journal; in Proceedings of the American Psychological Association Annual Meeting, 1967.

22-HE-3 TITRATION AND DOUBLE RESPONDING AS TECHNIQUES PROMOTING PROFICIENT LEARNING IN RETARDATES

Purpose: To determine the relative effectiveness of the techniques of Double Responding (DR), Titration (T), and Double Responding plus Titration (DR + T) under conditions in which Stimulus and Response were spatially discontiguous by an 18-inch vertical distance.
Subjects: 72 retardates, ages 14 to 30, from schools and workshops in Washington, D.C. metropolitan area, divided into six groups and matched for M.A. by Peabody Picture Vocabulary test. Mean M.A. was 9.70 with a range of .28.
Methods: Subjects were presented with a two-choice discrimination under conditions of DR, T, and DR + T. Performance was compared with that of subjects under control conditions of learning with total contiguity (C-0), with S-R discontiguity of 18 inches without any of the specified techniques (C-18), and minimal discontiguity, a S-R separation of less than one inch (C-<1).
Findings: Findings indicate that the techniques of DR, T, and DR + T promote proficient discrimination learning under a discontiguous condition in which Stimulus and Response were separated by 18 inches in the vertical plane as compared to the level of efficiency in learning at this separation without employing these techniques.
Duration: July-October 1966.
Investigator(s): Richard A. Wunderlich, Ph.D., Associate Professor of Psychology, Catholic University, Washington, D. C. 20017.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: In Proceedings of The American Psychological Association Annual Meeting, 1967.

22-HE-4 LEARNING SET EFFICIENCY IN MENTALLY RETARDED CHILDREN

Purpose: To test Harlow's hypothesis that a small number of trials per problem in the early stages of learning set (LS) formation should produce minimal interproblem improvement and that a larger number of trials per problem should result in significant amounts of early interproblem learning; also, that later in the training, maximum interproblem gain should be achieved in relatively few trials per problem.

Subjects: 31 educable mentally retarded children with I.Q.'s ranging from 53 to 77.
Methods: Seventeen subjects were placed in a criterion training group and 14 in a fixed trials group. Learning set task administered was the object-quality discrimination problem. During the experimental period, the fixed trials training group received three trials per problem and 10 problems per day. Criterion training group also received 30 training trials per day for five days, but each discrimination problem was presented for either a maximum of 20 trials or until the subject reached the criterion of nine out of 10 consecutive correct responses. After receiving 150 training trials each, both groups were presented with 50 additional three-trial problems.
Findings: Preliminary results tend to confirm Harlow's hypothesis of the superiority of using larger numbers of trials per problem early in the learning.
Duration: July 1967-January 1968.
Investigator(s): Melvin E. Kaufman, Ph.D., Associate Professor of Rehabilitation Psychology, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): University of Wisconsin Research and Training Center in Mental Retardation.
Publications: To be submitted to American Journal of Mental Deficiency.

22-HG-1 EARLY LANDMARKS OF DEVELOPMENT WITH A YOUNG DOWN'S SYNDROME NEW ZEALAND POPULATION

Purpose: To study patterns among a group of patients with Down's syndrome, noting physical disability, chromosomal patterns, dermatoglyphics, availability of community services, etc.; to study incidence of Down's syndrome among Maoris, which, at present, is lower than for any reported ethnic group; to develop a table predictive of future potential for professionals dealing with young Down's syndrome children.
Subjects: 230 children with Down's syndrome, ages one month to six years, both hospital and home samples.
Methods: Use of Gesell Developmental Schedules noting landmarks of development; identifying history such as age of parents, genealogy data, etc.; investigation of chromosomal analysis; dermatoglyphic studies; and medical resumé from local doctor.
Duration: February 1965-April 1968.
Investigator(s): Jack B. Share, Ph.D. Candidate, Senior Lecturer, Department of Education, Victoria University, Wellington, New Zealand.
Cooperating group(s): Mental Health Division, Head Office, Wellington, New Zealand.
Publications: Preliminary findings to be presented at pediatric conference; article to be submitted to American Journal of Mental Deficiency.

22-HH-1 IMPROVEMENT OF LANGUAGE SKILLS IN RETARDED CHILDREN

Purpose: To provide sensory and motor experiences which will stimulate language development in non-verbal retarded institutionalized children of nursery age; to provide sensory, motor, perceptual and language experiences which will develop language skills in young, low-verbal, mentally retarded institutionalized children; to provide language stimulation and speech correction for school age and adult mentally retarded institutionalized women.

Subjects: Selected residents at a state institution for the retarded: 119 children, ages 2-6 to 30-10; experimental program with matched controls for 9 children, ages 2-6 to 6-0, in the nursery.
Methods: Structured experiences providing sensory and motor stimulation are accompanied by appropriate verbal label to stimulate language understanding and usage. In the school, language stimulation and speech therapy classes are provided by three speech pathologists. In the nursery and full care cottage for young children, classes are given by speech aides, supervised by a speech pathologist. The speech aides are non-professional high school graduates trained on the job by the speech pathologist.
Findings: Tests with nursery experimental group demonstrate growth in I.Q., Social Age and Social Quotient, and language understanding and usage of the experimental group over the matched controls. Growth in language understanding and usage is measured yearly by a battery of tests, including Illinois Test of Psycholinguistic Abilities, Templin-Darley Test for Articulation, and Peabody Picture Vocabulary test.
Duration: June 1964-1970.
Investigator(s): Eva Hubschman, M.A., Project Director, North Jersey Training School, P.O. Box 215, Totowa, N. J. 07511.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Submitted to Journal of Mental Deficiency and Journal of Speech and Hearing Disorders, Fall 1967; reports delivered at Meetings of Speech Association of the Eastern States, American Association on Mental Deficiency, American Speech and Hearing Association, November 1967.

22-HH-2 EXPERIMENT IN TEACHING RETARDED BLIND CHILDREN

Purpose: To discover ways, means, and methods of helping severely retarded blind children to be independent in activities of daily living, in manipulating materials, and in exploring environment.
Subjects: 43 retarded blind children at Pacific State Hospital.
Methods: College students with majors in sociology, psychology, or education were recruited to work, each with one child, at development of whatever abilities the child had, and to investigate areas to which he could be introduced.
Findings: The one-to-one relationship for only a few hours weekly lead to notable advancement toward independence in children who are so retarded that intelligence cannot be measured.
Duration: Summer 1966-August 1967.
Investigator(s): Irene Blanchard, Ph.D., Research Speech Correction Teacher, Don Bowling, M.A., Principal, and R. Lincoln Roberts, M.A., Vice Principal, Educational Services, Pacific State Hospital, Box 100, Pomona, Calif. 91766.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Mental Retardation; Outlook for the Blind; others pending.

22-HH-3 CREATING THERAPEUTIC PYRAMIDS USING MENTALLY RETARDED PATIENTS

Purpose: To develop procedures whereby institutionalized adolescent retardates acting as tutors can be taught to use modeling and reinforcement techniques to modify the verbal and non-verbal behaviors of younger retardates (trainees).

Subjects: Trainees are non-speaking institutionalized retardates under 10 years of age; tutors are institutionalized teenage or young adult retardates who are ambulatory and able to speak intelligibly.
Methods: An attempt is made to create a therapeutic pyramid in which each of a few mental health professionals trains several retarded tutors who in turn then work with the retarded trainees, thus broadening the base of the pyramid and facilitating a more efficient use of professional time than is usually possible in institutional settings. Modeling is utilized to elicit the desired behaviors; reinforcement strengthens and maintains these responses. A modeling-reinforcement paradigm is employed on two levels: staff uses demonstration and reward to teach the tutors how to work with their trainees; tutors then use this same method to teach their trainees basic verbal and non-verbal skills. Results are evaluated through frequency and duration measures of several types of tutor and trainee behaviors such as tantrums, correct responding, etc., obtained from ongoing training sessions, objective tests of imitative behavior and language comprehension, and ward personnel ratings of social behaviors obtained before and after the training program.
Findings: Preliminary results indicate that retarded tutors can be taught to effectively apply modeling-reinforcement procedures to modify the behavior of younger retardates and that there are many beneficial side effects of this program for both tutors and trainees.
Duration: October 1967-September 1969.
Investigator(s): Carol Kupers Whalen, Ph.D., Research Specialist, Fairview State Hospital, Costa Mesa 92626; and Barbara A. Henker, Ph.D., Assistant Professor, University of California, Los Angeles, Calif.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned, 1968.

Gifted

22-IA-1 "SOFT SIGNS" AND SCHOLASTIC SUCCESS: A NEUROLOGICAL STUDY OF GIFTED CHILDREN

Purpose: To ascertain the frequency of minimal neurological abnormalities in a group of children with superior intelligence.
Subjects: 49 children with I.Q.'s ranging from 130 to 161 in Educationally Advanced classes of the Salem Public School System; control group of 30 children with normal intelligence.
Methods: Complete neurological examinations, EEG's, and special tests for fine motor coordination were performed on all subjects.
Findings: A small number of both groups had minimal neurological abnormalities such as choreiform movements, slight clumsiness, minor eye muscle deviations, etc.
Duration: April-June 1967.
Investigator(s): Peggy J. Copple, M.D., Assistant Clinical Professor of Pediatrics, University of Oregon Medical School, Portland, Ore. 97201.
Cooperating group(s): Department of Psychology, Willamette University, Salem, Ore.
Publications: Material in preparation for publication in neurological and educational journals; paper read at Academy of Pediatrics Postgraduate Course on Learning Disorders, August 1967, Portland, Ore.

Emotionally Disturbed and Mentally Ill

22-JA-1 PREVALANCE OF EMOTIONAL DISTURBANCE AS THE PRIMARY DISABILITY IN CLASSES FOR THE MENTALLY RETARDED

Purpose: To establish an estimate of the number of children presently in classes for the mentally retarded who have some form of emotional disturbance rather than mental retardation as their primary disability.
Subjects: A random, stratified sample of classes for the mentally retarded in 26 Florida counties.
Methods: Survey of teachers.
Findings: Approximately 20 percent of the children in classes for the mentally retarded have emotional disturbance as their primary disability. This percentage varies depending upon whether or not the county provides public school facilities for the emotionally disturbed.
Duration: January-November 1967.
Investigator(s): Myron A. Cunningham, Ed.D., Professor, Marnell L. Pierce, M.Ed., Instructor, and John F. Jacobs, M.Ed., Doctoral Fellow, College of Education, University of Florida, Gainesville, Fla. 32601.
Cooperating group(s): Florida Educational Research and Development Council.
Publications: To be published as a monograph by Florida Educational Research and Development Council, 1968.

22-JA-2 DETECTING NEUROTIC FORERUNNERS IN ELEMENTARY SCHOOL CHILDREN BY MEANS OF CATTELL'S ESPQ AND CPQ SCALES: A PILOT STUDY

Purpose: To determine prevalent problem areas among elementary school children for purposes of programming appropriate educational and mental health services.
Subjects: All the children in grades 1 to 8, inclusive, of an integrated public school.
Methods: Children were screened by means of Cattell's Early School Personality Questionnaire (ESPQ, 1966) and the Children's Personality Questionnaire (CPQ, 1963). Analysis of variance was applied to the test data consisting of 17 personality variables, and intercorrelations between first order and second order variables were also obtained.
Findings: Statistically significant differences were found between boys and girls on several of the personality variables. Intercorrelations showed the greatest positive r between the variables of neuroticism and anxiety.
Duration: October 1966-May 1967.
Investigator(s): Rhea R. Hilkevitch, Ph.D., Director of Research and Evaluation, and Charles Shooster, M.A., Staff Psychologist, John Madden Zone Center, State Department of Mental Health, Roosevelt Rd. and First Ave., Hines, Ill. 60141.
Cooperating group(s): Statistical Evaluation Section, State Department of Mental Health.
Publications: Publication planned; paper presented at Midwestern Psychological Association Meeting, 1967.

22-JA-3 ASSESSMENT OF PATHOLOGY IN CHILDHOOD: PROBLEMS OF DIFFERENTIAL DIAGNOSIS

Purpose: To assess pathology in childhood and the problems of differential diagnosis. (See *Research Relating to Children*, Bulletin No. 16-J-3.)
Subjects: Children with developmental disturbances, sleep disturbances, obsessional neurosis, phobias.
Methods: Clinical and theoretical material is elicited using the "Developmental Profile" as the diagnostic tool. Material is obtained from cases examined diagnostically, from cases in psychoanalytic treatment, from Indexed Cases (in files) with discussion and organization of data in several study groups. Infantile and Adult Neuroses are compared.
Duration: October 1965-September 1967.
Investigator(s): Anna Freud, LL.D., Director; Liselotte Frankl, M.D., Psychiatrist-in-Charge; and Humberto Nagera, M.D., Psychiatrist and Project Coordinator, Hampstead Child Therapy Clinic, 12 & 21 Maresfield Gardens, London N.W. 3, England.
Publications: Monograph submitted for publication; in *The Psychoanalytic Study of the Child* 21, 1966; Monograph No. 2 of *The Psychoanalytic Study of the Child*, 1966.

22-JB-1 SYMPTOM CHANGE DURING INTAKE STUDY

Purpose: To study the effect of symptom change on personality development and to learn which cases are suitable for short-term therapy; to try to determine whether modification of symptoms represents a fundamental change in character development or whether it will be replaced by other symptoms; and to identify the factors influencing the change.
Subjects: All new admissions under age five, seeking service at the Child Development Center.
Methods: Cases which show modification are catalogued to see whether certain symptoms are more likely to show change than others, i.e., bowel retention, sleep disturbance, enuresis, hairpulling, etc. Each case is evaluated according to specific data which include description of symptom, age at onset, duration, treatment, if any, prior to study, suggestions made by worker during study, changes made spontaneously by parent or teacher, subsequent course and appearance of new symptoms, reaction of family members to symptom, parents' view of what influenced change, their response to change, and whether change stablized. Each case is reviewed intensively in an attempt to arrive at a dynamic formulation. A controlled situation is set up between worker and child to see whether the same situation can be replicated with revival of symptoms, or whether integration has been established.
Duration: October 1966-continuing.
Investigator(s): Nina R. Lief, M.D., Psychiatrist, Child Development Center, 120 W. 57th St., New York, N. Y. 10019.

22-JB-2 CHILDHOOD EMOTIONAL DISORDERS AND THE NON-RESTING EEG

Purpose: To investigate the feasibility of recording electroencephalograms from children with emotional disorders while they are at play; specifically, to determine whether the non-resting electroencephalogram is useful in differentiating children with different types of emotional disorders.
Subjects: Children with aggressive or neurotic emotional disorders.
Methods: Electroencephalograms are recorded via telemetry with consideration of three aspects: (1) period of the dominant rhythm from

central, parietal, and occipital regions, (2) complexity of the waves recorded from these areas, and (3) frequency distribution of the periods of individual waves in selected intervals. If procedure is feasible, the EEG's of children with aggressive emotional disorders will be compared with those of children with neurotic emotional disorders to determine whether the non-resting electroencephalogram is useful in differentiating the two groups.
Duration: 1966-1968.
Investigator(s): Walter W. Surwillo, Ph.D., Associate Professor of Clinical Psychology, and Reginald Quilter, Bio-Medical Technologist, Child Psychiatry Research Center, University of Louisville School of Medicine, Louisville, Ky. 40202.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-JB-3 THE USE OF PERCEPTUAL-MOTOR-BODY TRAINING WITH SEVERELY DISTURBED INSTITUTIONALIZED CHILDREN

Purpose: To gain information as to whether or not: (1) children with emotional and/or learning difficulties sufficient to require institutionalization are prone to have poor body concepts (perceptual-motor difficulties); (2) brief body image training, geared to general perceptual-motor difficulties as outlined by Newell Kephart, will increase the functional level of these children's abilities as a group in the areas of basic perceptual-motor skills, psychosocial adjustment, and academic acuity.
Subjects: 16 inpatient residents at the William Healy School, ages 8 to 12, who are enrolled in the Special Education Service Program.
Methods: Administration of a test battery including the Purdue Perceptual-Motor Survey, California Achievement Test Battery, Developmental Form Sequence, Standard Figure Drawing, and two sub-tests of the Illinois Test of Psycholinguistics to all subjects; division of subjects into two matched groups on the basis of age, sex, I.Q., and ranking on the perceptual-motor survey and academic achievement tests; daily paced individual training sessions utilizing Kephart's training program for one group for a period of twelve weeks, with the other group serving as control; re-administration of the pre-training test battery to all subjects.
Findings: Pre-test findings indicated that the group of 16 subjects as a whole tended to be very poor in perceptual-motor-body ability as was speculated in the original hypothesis.
Duration: November 1966-September 1967.
Investigator(s): Ned Gaylin, Ph.D., Supervising Psychologist III, and Katherine Wimmer, M.Ed., Director, Special Education Service, Institute for Juvenile Research, 907 S. Wolcott St., Chicago, Ill. 60612.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-JB-4 THREE EARLY READERS; A CASE STUDY OF THREE CHILDREN WHO COULD READ AT A VERY EARLY AGE

Purpose: To investigate the cases of three very disturbed children who were able to read at age two in order to discover similarities and differences in them and their backgrounds and find factors which may have caused their abnormal development.
Methods: Case study method utilizing psychiatric evaluation, psychological testing, social work intake material, and available history.

Duration: March 1967-January 1968.
Investigator(s): Leon Tec, M.D., Medical Director, and Richard M. Starr, Jr., M.Ed., Clinical Psychologist, Mid-Fairfield Child Guidance Center, Inc., 74 Newton Ave., Norwalk, Conn. 06851.

22-JB-5 CHILD-REARING ATTITUDES OF MOTHERS OF EMOTIONALLY DISTURBED CHILDREN

Purpose: To explore some factors that may be important in the etiology, diagnosis, and treatment of emotional disturbance in children attending public elementary schools; specifically, to investigate maternal attitudes and their relationships to the child.
Subjects: Experimental group of 90 mothers of children identified as emotionally disturbed by the school social workers and psychologists through the use of social histories, psychological tests, and interviews with children and their parents. Children were between ages 6 and 12 and awaiting placement in special classes for the emotionally disturbed; their mothers had not been advised of their pathology. Control group was composed of mothers of children not diagnosed as disturbed and living in the same geographical area as the experimental group.
Methods: Parental Attitude Research Instrument was administered to both groups, along with a brief bibliographical questionnaire. Differences between groups were measured by t test.
Findings: Significant differences were found between the two groups in that the experimental group felt their husbands were much more inconsiderate of their feelings; significant differences were also found in family size and incidence of emotional disturbance; differences were also evident in communication levels and the sex of the disturbed child.
Duration: January-June 1967.
Investigator(s): Anthony J. LaPray, Ed.D., Assistant Professor of Educational Psychology, Brigham Young University, Provo, Utah 84601.
Publications: Publication in preparation, 1968.

22-JB-6 SYMPTOM CHECKLIST FACTOR STUDY

Purpose: To compare the symptom picture obtained on child guidance patients by three methods: (1) Wichita Symptom Checklist, (2) Peterson Symptom Checklist, and (3) Institute for Juvenile Research Symptom Checklist; to compare the factors so obtained with those obtained in previous investigations using school children and clinic patients.
Subjects: 63 boys and 36 girls, ages 10 to 13, who were patients at the Institute for Juvenile Research.
Methods: The three checklists were separately factor analyzed; a canonical analysis will be performed.
Findings: From the three symptom checklists, four factors each were found for the Peterson and Wichita Checklists and three factors for the IJR Checklist. Two of the four factors found on the Peterson appear to be similar to personality and conduct factors identified in previous research. The analysis of the data involves comparison of the factors obtained from the three checklists.
Duration: August 1966-May 1968.
Investigator(s): Elise E. Lessing, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: To be published in a professional journal.

22-JC-1 SELF-INFLICTED INJURIES IN THE PRE-ADOLESCENT CHILD: A STUDY OF PARENT ATTITUDES

Purpose: To study (1) the concept of death in the pre-adolescent child and the factors which contribute to self-inflicted injuries; and (2) the factors within the home environment, such as parent attitudes and feelings towards child rearing, in order to understand those factors which might be regarded as predictive clues to future self-inflicted injury.
Subjects: Pre-adolescent children referred through suicide prevention centers and medical and psychiatric facilities; a control group of normal families.
Methods: Statistical analysis is made of a number of attitude rating scales obtained from experimental and control families. Analysis of variance and factor analysis will be done to help in determining those variables which might be regarded as predictive clues. In addition, each child is given a complete battery of psychological tests in order to identify those intra-psychic characteristics which make a child behave in a self-destructive manner.
Duration: July 1966-1970.
Investigator(s): Morris J. Paulson, Ph.D., Assistant Professor of Medical Psychology, University of California Medical Center, Los Angeles, Calif. 90024.

22-JD-1 INDUCED RESPIRATORY CHANGE IN ASTHMATIC CHILDREN

Purpose: To pursue preliminary findings that, after viewing a motion picture of another child having asthma, asthmatic children report increased respiratory distress.
Subjects: Approximately 35 asthmatic children.
Methods: Will obtain subjective and objective measures of respiratory and autonomic responses to the experimental film alone and to the film in combination with a bronchial challenge. Purpose of the latter is to test a "summation of stimuli" hypothesis.
Findings: Pilot results show subjective increases in respiratory distress and, in one instance thus far, evidence of increased severity of wheezing.
Duration: June 1967-May 1969.
Investigator(s): Jonathan H. Weiss, Ph.D., Chief, Clinical Psychology, Children's Asthma Research Institute and Hospital, Denver, Colo. 80204.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-JD-2 INTERDISCIPLINARY STUDY OF ADOLESCENT ENURESIS

Purpose: To clarify and define the various components of adolescent enuresis; to define causative factors as far as this is possible.
Subjects: Nocturnal enuretics, ages 12 to 18, referred to Adolescent Clinic with enuresis as primary or secondary complaint; two control groups of 25 non-enuretic clinic patients and 25 non-enuretic adolescents from the surrounding community, matched for age and sex.
Methods: Medical, social psychological, and psychiatric data were collected on all subjects. Data were analyzed through cross-correlation between findings of the different disciplines and the three groups of subjects.
Duration: September 1965-December 1967.

Investigator(s): Solbritt E. S. Murphy, M.D., Pediatrician and Clinical Instructor; Jackson D. Nickols, M.S., Psychologist and Instructor in Pediatrics and Psychiatry; Agnes E. Umphress, M.S.W., Clinical Social Worker; and Sherrel L. Hammar, M.D., Director, Adolescent Clinic, Division of Child Health, University of Washington, Seattle, Wash. 98105. (Reported by Margaret A. Ohlson, Ph.D., Research Coordinator, Division of Child Health.)
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Paper presented at Annual Meeting of American Academy of Pediatrics, October 22, 1967, Washington, D. C.; plan to publish in pediatric, sociological, and psychological journals.

22-JE-1 THE ACQUISITION OF IMITATIVE RESPONSES AND EVIDENCE FOR NEGATIVISM IN AUTISTIC CHILDREN

Purpose: To investigate the responses of the autistic child occurring during the acquisition stage of learning which impede the performance of the reinforced response.
Subjects: Three autistic latency age males on inpatient service who do not use social-verbal communication.
Methods: Each child receives 12 45-minute sessions a week during meal times. Responses by the child that match the immediately preceding ones of the model are reinforced by the model with food. Records are kept of those responses that occur frequently. These responses include some of the reinforced imitative responses but also include a large proportion of non-reinforced responses that seem to interfere with the occurrence of the imitative responses. These interfering responses are investigated.
Findings: Interfering responses often include responses that are a "compromise" response relative to the one reinforced. The reinforced response will often occur at a better-than-chance frequency on one occasion only to be replaced by an interfering response on the next occasion. Autistic children may have correct responses in their response repertory which they will not emit under certain conditions but will under other conditions.
Duration: July 1966-September 1968.
Investigator(s): Delmont Morrison, Ph.D., Assistant Clinical Professor of Medical Psychology; Dale Miller, M.A., Educational Psychologist; and Berta Mejia, B.S., Staff Nurse, Department of Psychiatry, University of California Medical School, San Francisco, Calif.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Paper submitted to American Journal of Orthopsychiatry; others to be submitted to appropriate journals.

22-JG-1 A HOME TRAINING PROGRAM FOR MENTALLY ILL CHILDREN

Purpose: To evaluate a highly individualized Home Training and Guidance Program designed to prepare mentally ill children, considered "uneducable", for group living within the family and community.
Subjects: 24 mentally ill children, ages three to seven, currently on waiting list of League School for Seriously Disturbed Children, and their parents; control group of 24.
Methods: Program is based on early diagnosis, psycho-educational assessment, and the relevant interdisciplinary recommendations that

accompany the assessment. Child and mother attend individual one-hour training sessions. Teacher uses specific remedial, habilitative, therapeutic, and educational techniques and activities that may reduce, correct, or remove the child's disabilities, or work around and compensate for irremedial disabilities if possible. Mother observes teacher attitudes, techniques, relationships, and interactions with child, has additional conferences with teacher, and participates in parent-group counseling sessions with the social worker. This should give parents greater understanding of the child and assurance and competence in handling him, thus helping the child to grow.
Duration: Not reported.
Investigator(s): Carl Fenichel, Ed.D., Program Director, and Bernice Bukatman, M.S., Co-director, League School for Seriously Disturbed Children, 196 New York Ave., Brooklyn, N. Y. 11216.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-JG-2 SHORT-TERM FAMILY THERAPY WITH FAMILIES OF SCHOOL UNDERACHIEVERS

Purpose: To evaluate the effect of 12-session conjoint family therapy on school achievement; to evaluate the therapist's ability to use two contrasting types of family therapy.
Subjects: Eighth grade boys, designated as scholastic underachievers.
Methods: Therapist uses two types of treatment, one which defines the study of family transactions within the session as the object of the study, and one which attempts to have the family set up experiments to be tried between sessions. Evaluation of change over course of therapy will be based on review of grades before and after study, and changes noted by teachers during this period. Changes in family modes of interacting will be studied by repeating family interactional tasks after therapy.
Duration: 1966-1973.
Investigator(s): Helm P. Stierlin, M.D., Ph.D., Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Chevy Chase, Md. 20203.

22-JG-3 MULTIFAMILY GROUP THERAPY

Purpose: To explore the therapeutic effect of placing problem families together in what is essentially an encapsulated societal milieu. This is done to expose isolated families to the corrective influence of what occurs in other families so that their rigid and distorted ideas of familial functioning and societal organization can be brought out and worked up; to set up criteria for inclusion in multifamily groups.
Subjects: Families from the area serviced by the Child Guidance Clinic of the Oranges, Maplewood, and Millburn.
Methods: Three families, each consisting of the mother, father, and designated child patient, are seen in a group setting on a weekly basis by a male and a female co-therapist. Siblings are introduced into the group when it is deemed appropriate. Families are seen for one year minimally and longer if necessary. All groups are seen by the same therapists to elimate therapist effect and are subject to the same treatment procedures. All group sessions are taped.
Findings: Families with the same defensive structures tend to reinforce each other in their pathology, and resistance in the groups is increased.

Verbal capacity and symptoms, *per se*, are not significant. Age of child patient seems to be an important factor as older children respond better to the group setting.
Duration: September 1964-June 1969.
Investigator(s): Marion B. Powell, Ph.D., Chief Psychologist, and John P. Monahan, M.S.W., Clinic Administrator, Child Guidance Clinic of the Oranges, Maplewood, and Millburn, 115 S. Munn Ave., East Orange, N. J. 07018.
Publications: Paper presented at American Orthopsychiatric Association Meeting, San Francisco, Calif., April 1966.

22-JG-4 GROUP THERAPY WITH PARENTS WHOSE CHILDREN ARE PARTICIPATING IN A DAY CENTER FOR EMOTIONALLY DISTURBED CHILDREN

Purpose: To test the hypotheses that therapeutic help to emotionally disturbed latency age children living at home can be significant only if parents are aided to substantial attitudinal growth, and that provision of group therapy for parents during the time their children are receiving relevant treatment and education can effect parental attitude change.
Subjects: Eight families in which diagnosis precluded extremes in psychotic or character disorder of child or parent, prognosis was that child could return to public school within a two-year period, and the parents would and could use group psychotherapy. Some of the children were delinquent.
Methods: Each parent is evaluated by caseworker, psychiatrist, and psychologist as a basis for consideration. Group psychotherapy offered to both parents as a contingent to child's participation in the academic program. Commitment is for two years, with each parent meeting weekly with a mixed group of non-spouses.
Duration: 1965-1967.
Investigator(s): George E. Gaby, M.S.W., Caseworker, Children's Study Home, 38 Sherman St., Springfield, Mass. 01109. (Reported by NCCD. See Note, p. 51.)
Cooperating group(s): Massachusetts State Department of Welfare.

22-JH-1 TECHNICAL PROBLEMS IN CHILD PSYCHOANALYSIS

Purpose: To investigate and clarify analytic therapy problems, and methods of handling them.
Subjects: Patients of 12 therapists in private practice.
Methods: Presentation and discussion of clinical data with records and follow-up of future developments.
Duration: May 1966-continuing.
Investigator(s): Nathan N. Root, M.D., American Association of Child Psychoanalysis, 201 E. 66th St., New York, N. Y. 10021.
Publications: Presentation of data at scientific meeting of American Association of Child Psychoanalysis.

22-JH-2 IMPULSE CONTROL; NURSERY SCHOOL EDUCATION AND DEVELOPMENT

Purpose: This research represents part of a larger research program designed to study modifications in current educational and therapeutic practices which may be generalized to the larger group of culturally disadvantaged children.

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Subjects: Children from the Nursery School at the Child Study Center and other nursery schools within the community.
Methods: Individual, therapeutic, and clinical assessment, and quasi-experimental techniques are used to evaluate existing status and change over a period of time in response to various intervention techniques. Wherever possible, experimentally designed situations are introduced to help gather data.
Duration: September 1966-continuing.
Investigator(s): Seymour L. Lustman, M.D., Ph.D., Professor of Psychiatry, Child Study Center, and Department of Psychiatry, Yale University, New Haven, Conn. 06510.
Publications: In *Psychoanalysis--A General Psychology*, M. Schur, L. Newman, and A. J. Solnit (Eds.). New York: International Universities Press, 1966.

22-JH-3 PILOT PROGRAM WITH SERIOUSLY EMOTIONALLY DISTURBED DEAF CHILDREN, PHASE I

Purpose: To determine (1) the best teaching techniques to use to bring about behavioral change in seriously emotionally disturbed deaf children that will result in their being able to live harmoniously with others and learn in a small group situation; (2) the appropriate program, activities, and living arrangements for the children to bring about the changes stated above; and (3) what effect parental education and counseling have in bringing about changes in the behavior of these children.
Subjects: 16 seriously emotionally disturbed deaf boys, ages 7 to 11.
Methods: Use of operant conditioning procedures in both the educational program and residential living program; parent counseling, conferences, instruction of parents in manual communication, and group therapy sessions with a trained psychological counselor.
Findings: Three of the 16 boys were successfully returned to a program for normal deaf children after a period of one year.
Duration: October 1966-June 1968.
Investigator(s): Richard G. Brill, Ed.D., Superintendent, and Robert K. Lennan, M.A., Project Supervisor, California School for the Deaf, 3044 Horace St., Riverside, Calif. 92506.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Final report to be made available through Educational Resources Information Center, U. S. Office of Education.

22-JH-4 RECIPROCAL INHIBITION THERAPY WITH NEUROTIC CHILDREN

Purpose: To test the feasibility of applying Wolpe's Reciprocal Inhibition Therapy to a large group of children with phobic disorders.
Subjects: 144 children diagnosed as phobic by a clinical team.
Methods: Children are assigned at random to a program of Reciprocal Inhibition Therapy (RIT), traditional play therapy (PT), or no therapy. Two therapists conduct both types of treatment. Patients receiving both RIT and PT will have a maximum of 24 therapy sessions lasting one hour and spaced one week apart. Six weeks after termination of treatment, a follow-up evaluation will be done, comparing the three groups. Patients receiving no therapy will be re-assessed after 32 weeks. Difference scores between first and second assessment will be analyzed in a factorial design.

Duration: June 1967-May 1970.
Investigator(s): Lovick C. Miller, Ph.D., Director of Research, Child Psychiatry Research Center, University of Louisville School of Medicine, Louisville, Ky. 40202.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted for publication.

22-JH-5 THE TREATMENT OF AUTISTIC-LIKE CHILDREN THROUGH OPERANT CONDITIONING IN AN OUTPATIENT CLINIC

Purpose: To determine the feasibility of treating autistic-like children through operant conditioning on an outpatient basis; to develop methods which will help to accurately select parents who can be successful in helping to "treat" their own child; to encourage local, state, and federal agencies to take more responsibility in attempts to help these children.
Subjects: Children, ages four to eight, who exhibit bizarre behavior, have failed to develop normal social relationships, are often out of contact with reality, and demonstrate bizarre speech or have no speech at all; their parents.
Methods: Parents and children are chosen after screening by psychologist, speech pathologist, and psychiatrist, with selection based mainly on observable behavior, interaction, and results of testing with several standardized scales. Each child is seen individually for one hour daily at the clinic for about three months. Operant conditioning and methods similar to those developed by Lovaas are used to teach speech and "socialization". Emphasis is on speech, and food is used as the reinforcer. Parents are taught to carry on the same program at home. After child begins to respond to social reinforcers (good boy!), he is placed in a nursery school with other children in the same program; there is also some interaction with normal children.
Findings: It is feasible to treat autistic-like children through operant conditioning on an outpatient basis. Treatment is economical because lay people can be trained as therapists in the short period of two months.
Duration: February 1967-continuing.
Investigator(s): Michael Goldblatt, Ph.D., Staff Clinical Psychologist, and William Trachtenberg, M.A., Director of Speech Pathology, St. Christopher's Hospital for Children, Philadelphia, Pa. 19133.
Cooperating group(s): Philadelphia Board of Education.
Publications: Early findings to be submitted for publication to American Journal of Orthopsychiatry, Journal of Consulting Psychology, or Behavior Research and Therapy.

22-JH-6 THE EFFECTS OF ECT ON VISUO-MOTOR AND PERCEPTUAL FUNCTIONING IN CHILDHOOD SCHIZOPHRENIA

Purpose: To evaluate immediate and long-term effects of electric shock therapy on test performance of schizophrenic children.
Subjects: 20 children in residential treatment at Children's Unit, Creedmoor State Hospital.
Methods: A battery of tests, including the Bender-Gestalt, Picture Completion, Picture Arrangement, Block Design, Benton Visual Retention, Object Emergence, and hidden figures was administered immediately before ECT, immediately after completion of the series, and one month later.

Findings: A general improvement was observed in Bender-Gestalt performances. About half of the sample demonstrated improved pattern of performance on perceptual tests.
Duration: 1966-1967.
Investigator(s): Leonard Cobrinik, Ph.D., Senior Research Psychologist, Children's Unit, Creedmoor State Hospital, Queens Village, N. Y. 11427.
Publications: Submitted for publication.

Socially Deviant

Note: Some of the following delinquency studies, as well as a few in other categories, were taken from the section "Current Projects," in Crime and Delinquency Abstracts, Vol. 4, Nos. 3 and 5, 1966 (formerly entitled International Bibliography on Crime and Delinquency). This publication is prepared by the National Clearinghouse for Mental Health Information of the National Institute of Mental Health (5454 Wisconsin Ave., Chevy Chase, Md. 20203) from material provided by the National Council on Crime and Delinquency (44 E. 23rd St., New York, N. Y. 10010). The studies are noted: (Reported by NCCD.)

22-KA-1 PREGNANCY IN SCHOOL CHILDREN IN THE LIGHT OF CHILD-PERCEIVED MOTHER-CHILD RELATIONSHIPS

Purpose: To determine whether the mother-child relationship, as perceived by the daughter, is a factor in determining the incidence of pregnancy in 13- to 15-year-old girls.
Subjects: 5,000 girls in six selected junior high schools with follow-up of those who become pregnant during a one-year observation period; control sample of 50 matched and 100 randomly chosen girls from original sample of 5,000.
Methods: In prospective phase of study, Schaeffer's Child-Reported Parental Inventory to measure certain factors in the mother-daughter relationship and investigator's questionnaire on the concept of trust are administered. In retrospective phase, estimated 50 girls who became pregnant are interviewed to further investigate the relationship to the mother and to determine patterns of and attitudes toward sexual activity.
Duration: June 1966-Fall 1967.
Investigator(s): Beverly H. Bowns, D.P.H. Candidate, Department of Mental Hygiene, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Md. 21205.
Cooperating group(s): Baltimore City Board of Education.
Publications: Publication planned.

22-KC-1 A STUDY OF JUVENILE DELINQUENTS IN DAR ES SALAAM, TANZANIA

Subjects: 100 juvenile offenders in approved schools and prisons; a control group of non-offenders, primarily school children.
Methods: Comparison of two groups on factors such as family background, incidence of broken homes, and peer group and school influences.
Duration: March 1966-1967.
Investigator(s): Carl G. Widstrand, University College, Dar es Salaam, Tanzania. (Reported by NCCD.)

22-KC-2 ATTITUDINAL BARRIERS TO DELINQUENCY CONTROL

Purpose: To learn how the general public views delinquency control and how attitudes differ among various groups.
Subjects: Representative sample of adult population in Wisconsin.
Methods: Sample given standardized interviews; analysis of significant differences used to determine how various strata view problem of delinquency control.
Findings: General public is apparently interested in punishment of delinquents but, at the same time, is interested in having highly qualified experts handle these problems. Ambivalence and confusion are evident. Attitudes vary according to social status: individuals of higher social status are found to be less punitive and show less confusion as to how delinquents should be treated. Analysis of data continuing.
Duration: October 1964-June 1967.
Investigator(s): William P. Lentz, Ph.D., Chief, Planning and Development; Paul H. Kusuda, M.A., Social Science Research Analyst; and James Lewis, Ph.D., Division for Children and Youth, State Department of Welfare, State Office Building, Madison, Wis. 53702. (Reported by NCCD.)
Publications: Journal of Research in Crime and Delinquency, January 1967.

22-KC-3 JUVENILE DELINQUENCY IN THE UNION OF SOVIET SOCIALIST REPUBLICS

Purpose: To survey the problem of juvenile delinquency in the Union of Soviet Socialist Republics.
Methods: Survey will include a study of juvenile delinquent types, incidence, distribution, frequency, and trends of occurrence.
Duration: Not reported.
Investigator(s): H. Kent Geiger, Ph.D., Professor of Sociology, University of Wisconsin, Madison, Wis. 53706. (Reported by NCCD.)
Cooperating group(s): Ford Foundation.

22-KD-1 JUVENILE NORMS ON THE ROTTER SENTENCE COMPLETION TEST

Purpose: To develop quantitative norms of juvenile delinquents and non-delinquents on the Rotter Sentence Completion test; to illustrate the use of this test in helping to identify and understand the life style of delinquents.
Subjects: 100 boys and 100 girls, all juvenile delinquents from the Essex County Youth House; control group of 100 boys and 100 girls.
Methods: Rotter Sentence Completion test is administered to delinquent and control groups, and results are analyzed.
Duration: April 1967-January 1968.
Investigator(s): Donald N. Lombardi, Ph.D., Associate Professor of Psychology, Seton Hall University, South Orange 07079, and Psychologist, Essex County Youth House, 70 Duryee St., Newark, N. J. 07103.
Publications: Publication planned.

22-KD-2 EARLY DETECTION OF JUVENILE DELINQUENCY

Purpose: To detect potential delinquency in children at an early age in order to intervene to abort its development.

Subjects: Over 100 children, ages two to three, admitted to pre-nursery section of Child Development Center since 1959.
Methods: Long-term follow-up through direct observation of children and parents by caseworkers, nursery school teachers, psychologists, and psychiatrists; recorded interviews; data collection on parent-child relationship, parental relations, and interpersonal relations. Based on above, investigators apply Glueck Social Prediction Table for two- to three-year-olds.
Duration: April 1967-continuing.
Investigator(s): Nina R. Lief, M.D., Psychiatrist, Child Development Center, 120 W. 57th St., New York, N. Y. 10019.
Cooperating group(s): New York City Youth Board.

22-KD-3 PREDICTION OF DELINQUENCY RATES IN CHILDREN OF PARENTS ON PAROLE FROM CORRECTIONAL INSTITUTIONS

Subjects: Six children with abnormal psychopathology referred to the investigator by their parents.
Methods: Children are evaluated clinically, and by means of projective tests and case histories.
Duration: Spring 1967-Spring 1968.
Investigator(s): Hans A. Illing, M.S.W., Ph.D., Staff Member, Hacker Clinic, and Senior Psychiatric Social Worker, Parole Outpatient Clinic, State Department of Corrections, 107 S. Broadway, Los Angeles, Calif. 90012.
Publications: To be submitted for publication.

22-KD-4 RECEPTION CENTER RESEARCH PROJECT

Purpose: To determine extent to which a coordinated diagnostic study and evaluation of offenders at a reception center is a factor in their rehabilitation; to develop criteria for a more effective treatment program.
Subjects: All newly committed male youths, ages 16 to 20 (except the mentally handicapped and those sentenced to death), received at the State Department of Correction Reception Center at Elmira.
Methods: Subjects are diagnostically studied, evaluated, and classified by specialists prior to their transfer to appropriate Department institutions.
Duration: October 1965-1970.
Investigator(s): Herbert L. Bryan, Division of Research, State Department of Correction, Governor Smith State Office Building, Albany, N. Y. 12225. (Reported by NCCD.)

22-KD-5 SCHOOL CAREERS OF JUVENILE DELINQUENTS

Purpose: To determine if there are particular types of school maladjustments which can be used to identify the delinquency-prone child.
Subjects: 12 secondary school classes in a particular region.
Methods: In a longitudinal study, school careers of subjects are being compared with a theoretically normal or "ideal" school career, based on statistics of the French Ministry of Education. Proportion in which certain maladjustments can be identified, number of school dropouts,

and number who were expelled from school will be analyzed in a study of the way in which a child's school career may be made more successful or unsuccessful.
Duration: 1962-1967.
Investigator(s): Henri Michard, Director, Centre de Formation et de Recherche de l'Education Surveillée, 54, Rue de Garches, Vaucresson, S. & O., France. (Reported by NCCD.)
Cooperating group(s): Ministère de la Justice, Service de l'Education Surveillée; Institut Pédagogique National; Délégation Interministérielle à la Recherche Scientifique et Technique; Ministère de l'Education Nationale, France; Department of Education, United Nations Economic and Social Council.

22-KE-1 STUDY OF THE CHARACTERISTICS OF JUVENILE DELINQUENCY

Purpose: To investigate the psychological, bio-medical, and sociological aspects of juvenile delinquency.
Subjects: 500 boys, ages 14 to 18, a representative sample of the juvenile delinquent population of France.
Methods: Pilot study of subjects, conducted from 1958-1961, experimented with methods of collection and analysis of data. Statistical analysis of data by a method called latent structure analysis led to establishment of a typology of juvenile delinquents. Major part of this study is now in progress.
Duration: 1958-1970.
Investigator(s): Henri Michard, Director, Centre de Formation et de Recherche de l'Education Surveillée, 54, Rue de Garches, Vaucresson, S. & O., France. (Reported by NCCD.)
Cooperating group(s): Ministère de la Justice, Service de l'Education Surveillée; Délégation Interministérielle à la Recherche Scientifique et Technique; Centre National de la Recherche Scientifique, France.

22-KJ-1 PARENTAL DISCIPLINE AND DELINQUENCY

Purpose: To determine the relationship between parental discipline and delinquency in adolescent males.
Subjects: 80 mothers and fathers of urban and rural delinquent and normal boys, ages 11 to 16.
Methods: Interviews with parents.
Duration: June 1966-March 1967.
Investigator(s): F. R. Wake, Ph.D., Associate Professor of Psychology, Carleton University, Ottawa, Ontario, Canada. (Reported by NCCD.)

22-KJ-2 ECONOMIC DEVELOPMENT AND JUVENILE DELINQUENCY

Purpose: To study the effects of industrialization and urbanization on the social relations within primary groups.
Methods: Comparative international research, using juvenile delinquency as a criterion of disorganization. A statistical study of offenses and their possible variations in each locality; a comparative case study of samples of delinquents from localities whose residents had a high incidence of geographic, social, and professional mobility, and samples of delinquents from localities with a low incidence.

Duration: 1964-1969.
Investigator(s): Henri Michard, Director; M. Peyre; and M. Selosse, Centre de Formation et de Recherche de l'Education Surveillée, 54, Rue de Garches, Vaucresson, S. & O., France. (Reported by NCCD.)
Cooperating group(s): Centre Européen de Coordination de Recherches et de Documentation en Sciences Sociales, Vienna, Austria; Ministère de la Justice, Centre d'Etudes Pénitentiaires, Warsaw, Poland; Institut des Sciences Juridiques et Politiques de l'Académie des Sciences, Hungary; Institut de Criminologie, Belgrade, Jugoslavia; Ministère de la Justice, Service de l'Education Surveillée; Délégation Interministèrielle a la Recherche Scientifique et Technique, France.

22-KJ-3 DIFFERENTIAL PATTERNS IN RURAL-URBAN DELINQUENCY

Purpose: To compare rural and urban patterns of delinquent behavior to see whether different family patterns are reflected.
Subjects: 20 institutionalized delinquents: 10 from urban and 10 from rural areas; comparison group of 10 urban and 10 rural non-delinquent high school students.
Methods: Subjects were tested on the Glueck scale of family solidarity and control and delinquency as modified by the New York City Youth Board.
Findings: The rural delinquent reflected greater family disorganization than the urban non-delinquent but less than the urban delinquent, and the urban non-delinquent revealed less family solidarity than the rural non-delinquent, reflecting general weakening of family control of youth in urban areas. In the rural area there appeared to be areas of social control in the community when they were lacking in the family. Delinquent behavior in the rural areas continues to be mostly of the individual type while sub-cultural or peer group delinquent patterns are reflected in the urban group.
Duration: January 1966-1968.
Investigator(s): Edward D. Stokes, M.S., Assistant Professor of Sociology, James Juaire, and Bruce Miller, Bemidji State College, Bemidji, Minn. 56601. (Reported by NCCD.)

22-KK-1 A COOPERATIVE PROGRAM FOR THE ALLEVIATION OF JUVENILE BEHAVIOR PROBLEMS

Purpose: To demonstrate the effectiveness of individualized education and vocational training in conjunction with intensive counseling in the prevention of juvenile delinquency.
Subjects: 180 students in Tulsa County, Oklahoma.
Methods: Services available from public schools, the courts, the Department of Public Welfare, and the Vocational Rehabilitation Agency will be coordinated, and efforts made to stimulate the interest and support of other community and governmental agencies. Continuous project evaluation will be conducted to determine effectiveness of project. Criteria to be used will be any reduction in number of delinquent acts committed by subjects and any increase in efficiency in provision of services to delinquents due to the coordination of efforts and activities by cooperating agencies.
Duration: 1965-1968.
Investigator(s): Glen Wallace, State Department of Education, Oklahoma Capitol Building, Oklahoma City, Okla. 73105. (Reported by NCCD.)
Cooperating group(s): Office of Research and Demonstrations, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

22-KR-1 THE WORK INCENTIVE PROGRAM FOR JUVENILE COURT WARDS

Purpose: To determine the effectiveness of a Work Incentive Program in abating recidivism among delinquent boys.
Subjects: Male juvenile court wards, ages 15 to 18.
Methods: Forty-five boys per summer reside at Juvenile Hall for periods of 30, 60, or 90 days, while taking part in work-furlough programs. They are transported to work assignments which include farming, working in car wash or service stations, and other labor paying minimum wages. Juvenile Hall provides job counseling and remedial schooling as well as food and lodging. Expenses, restitution, fines, and voluntary allotments are deducted from the boys' earnings.
Findings: Program dropouts were fewer than five percent, and about 30 percent of the boys continued in employment beyond the assigned time period. Juvenile law violations and delinquency abated 23 percent, but misbehavior recidivism was not markedly reduced. About 60 percent were known to be school problems, curfew violators, family dissidents, vandals, and petty law breakers after release. Although the Work Incentive Program is no more effective in abating recidivism than are more traditional treatment methods, temporary respite for the community is gained while these problem youngsters are segregated in such a program. Collateral benefits of work-training, positive work attitudes, maturation, and community appreciation were deemed to be worthwhile.
Duration: 1964-not reported.
Investigator(s): A. H. Giovannetti, Chief Probation Officer, Monterey County, P.O. Box 2135, Salinas, Calif. 93901.

22-KR-2 THE IMPACT OF INSTITUTIONALIZATION UPON DELINQUENT BOYS

Purpose: To measure attitude change associated with incarceration in an institution for "disturbed delinquent boys"; to relate attitude changes, if any, to the boys' behavior after release.
Subjects: 300 white and Negro boys, ages 16 to 18, consecutively released from an institution.
Methods: A questionnaire is administered and ratings obtained from staff at institution; boys are followed after release.
Duration: 1963-1968.
Investigator(s): Thomas G. Eynon, Ph.D., Associate Professor, Department of Sociology, Ohio State University, Columbus, Ohio 43210.
Cooperating group(s): Training Institute of Central Ohio, Columbus.
Publications: Report will be available from Dr. Eynon.

22-KS-1 COMPARISON OF THREE TREATMENT MODELS IN DELINQUENCY

Purpose: To determine (1) whether any one of three special treatment methods (intensive conjoint family therapy, intensive peer-group therapy, or a Negro self-image enhancement indoctrination program) is more effective than any other in changing delinquent attitudes or reducing delinquent and maladjustive behavior in lower socio-economic class delinquent boys; (2) whether any one of the three special treatment methods adds any degree of significant effectiveness to that achieved by a residential group-living program which places special emphasis on apprenticeship and job training and job placement; (3) whether the Youth Development Center at South Philadelphia, with a newly organized program, is more effective with this type of delinquent boy than two of the best facilities and programs now available, and whether it therefore might be a model for future planning in this field for the Commonwealth of Pennsylvania; and (4) the characteristics of the delinquent boys and of their backgrounds which differentiate those who improve in their attitudes and behavior from those who do not.

Subjects: 300 delinquent Negro boys, ages 16 to 19, court-committed to residence at the Youth Development Center, South Philadelphia: 100 in each of two treatment groups and 100 in a non-treatment control group; 60 delinquent boys at a control institution, the Youth Development Center in North Philadelphia, matched with the preceding sample for relevant social background variables; 100 non-delinquent boys at other institutions and schools.

Methods: Treatment and control groups are pre- and post-tested on a comprehensive psychological test battery, including approximately 25 different individually and group administered tests and a structured interview; behavioral adjustment ratings and disciplinary reports are made by institutional counseling staff. Subjects will be followed to determine recidivism rates.

Duration: July 1966-June 1970.

Investigator(s): Alfred S. Friedman, Ph.D., Director of Research, Philadelphia Psychiatric Center, Ford Rd. and Monument Ave., and Norman Flachs, M.S.W., Director, Youth Development Center at South Philadelphia, Philadelphia, Pa. 19131.

Cooperating group(s): Downingtown Industrial and Agricultural School, Downingtown; Office for Children and Youth, Pennsylvania Department of Public Welfare, Harrisburg, Pa.; Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

Publications: Book or monograph and journal articles planned.

22-KS-2 THE TREATMENT OF CHARACTER DISORDER BY PROLONGED CONTACT WITH MATERNAL SUBSTITUTES

Purpose: To determine whether sociopathic characters can be modified through corrective maternal relationships with selected mother substitutes.

Subjects: Three sociopathic girls, age 18; three middle-aged women.

Methods: Subjects were taken from a corrective school for girls and voluntarily committed to a psychiatric hospital unit where they were administered minimal daily doses of insulin to instill hunger and anxiety. Each girl was assigned a selected maternal companion with whom she interacted spontaneously five hours daily for six months.

Findings: Close dependent relationships developed, changes in identification took place, and there was some suggestion that super-ego changes are possible.

Duration: October 1966-December 1967.

Investigator(s): Morris A. Sklansky, M.D., Staff Training Analyst, Chicago Institute for Psychoanalysis, 180 N. Michigan Ave., Chicago 60649; and Kenneth Isaacs, Ph.D., Psychologist, Neuropsychiatric Institute, 912 S. Wood St., Chicago, Ill.

Cooperating group(s): Illinois State Psychiatric Institute, Chicago.

Publications: Plan to publish in psychiatric and criminology journals.

22-KS-3 PROJECT READY (REACHING EFFECTIVELY ACTING-OUT DELINQUENT YOUTHS)

Purpose: To develop a treatment and management program for bringing about behavioral and attitudinal changes in a group of delinquents who are not reached by traditional verbal techniques; to determine whether action-oriented treatment is more appropriate for "psychopathic" individuals.

Subjects: 20 institutionalized male delinquents, ages 16 to 19, identified as highly aggressive and impulsive on the basis of behavior ratings, an analysis of life history, and a personality questionnaire; a control group.
Methods: Based on the theory that psychopathic individuals are pathological stimulation seekers, an evening and weekend program was created to minimize boredom and provide varied forms of stimulation. Activities are of both a motor and verbal nature and include programmed games, slot car racing, athletics, psychodrama, special religious programs of a moral nature, and time-out rooms for inappropriate behavior. Experimental group will be compared with contrast group on a variety of measures of institutional adjustment.
Duration: July 1967-July 1968.
Investigator(s): Gilbert L. Ingram, Ph.D., Clinical Psychologist, and R. E. Gerard, Ph.D., Superintendent, National Training School for Boys; Robert B. Levinson, Ph.D., Chief, Psychological Services, Bureau of Prisons, U. S. Department of Justice, Washington, D. C.; Herbert C. Quay, Ph.D., Research Director, Children's Research Center, and Professor of Psychology, University of Illinois, Champaign, Ill. 61820.
Publications: To be published in a correctional journal.

22-KS-4 CENTER FOR TRAINING IN DIFFERENTIAL TREATMENT

Purpose: To develop and evaluate a center for training in the differential treatment of delinquents.
Subjects: Range of correction workers from administrators to line staff, law enforcement officers, school counselors, graduate students.
Methods: Center provides training and follow-up consultation in the use of interpersonal maturity classification (I-level) and the Differential Treatment Model. The Model, developed in the California Youth Authority's Community Treatment Project, defines nine sub-types of delinquents, prescribes treatment goals, and suggests treatment methods. Impact of the training on trainees and their parent agencies is studied. (See Research Relating to Children, Bulletin No. 19-KG-1.) Line staff are assessed in a study of matching worker and client. Training methods include didactic and discussion seminars, observation of and participation in an ongoing program for delinquents (Community Treatment Project). Research methods include interviews and tests for assessment of treater styles, tests for evaluation of accuracy of diagnosis and appropriateness of treatment planning, questionnaires, and interviews (pre-, post-) to determine the impact of the training and consultation on agency program and on treatment atmospheres.
Duration: August 1967-July 1971.
Investigator(s): Marguerite Q. Warren, Ph.D., Program Director, Center for Training in Differential Treatment, Institute for the Study of Crime and Delinquency, 3610 Fifth Ave., Sacramento, Calif. 95817.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Progress reports and curriculum materials.

22-KS-5 GROUP THERAPY FOR PARENTS OF DELINQUENT WARDS

Purpose: To determine benefits of a discussion therapy group for parents of delinquents.
Subjects: Six to eight parents of children who are delinquent court wards.

Methods: In the belief that parents' attitudes and actions have considerable influence on a child's behavior, subjects were organized into discussion therapy group meeting weekly for two hours in a neutral setting. Participation in group was voluntary, and parents could discontinue but would not be re-admitted once they had dropped out. Their children were seen on a regular individual casework basis.
Findings: Parents seemed to feel relieved of some stigma and anxiety by sharing experiences with other parents; hostilities expressed in the group appeared to have an effect of temporary catharsis; small changes in philosophy and behavior have resulted; and parents seemed to have gained some insights into their behavior and that of others.
Duration: May 1966-May 1967.
Investigator(s): G. F. McGarrity, Senior Probation Officer, San Diego County Probation Department, 220 W. Broadway, San Diego, Calif. 92101. (Reported by NCCD.)

22-KS-6 GROUP MEETINGS FOR PARENTS OF GIRLS WHO ARE UNDER THE SUPERVISION OF THE COURT

Purpose: To test the hypothesis that the home environment, which was a contributing factor in delinquency, must be altered if successful rehabilitation of delinquents is to take place.
Subjects: 37 couples and 8 single parents of 44 girls and one boy under court supervision.
Methods: Parents are ordered by court to attend group meetings where the need to correct misbehavior and credit good behavior is stressed.
Findings: Most of the children whose parents attended the sessions regularly have made satisfactory adjustments and are off probation.
Duration: October 1963-not reported.
Investigator(s): Lois M. Johnson, Juvenile Court, County Building, Kalamazoo, Mich. 49001. (Reported by NCCD.)
Cooperating group(s): Fidelity Federal Savings and Loan; Juvenile Division, Kalamazoo County Probate Court, Mich.

THE CHILD IN THE FAMILY

Family Relations

22-LA-1 THE OBJECTIVE MEASUREMENT OF INTRAFAMILY ATTITUDES

Purpose: To study intrafamily attitudes of normal families, i.e., the quality of the child's relationship to his siblings and parents; to investigate the relationship between such attitudes and life experiences and other behavioral criteria.
Subjects: 120 children and their parents.
Methods: Subjects were tested on a complementary battery of objective measures of intrafamily attitudes. Data are factor analyzed and resulting factors related to life data.
Findings: Analysis of data have revealed important and complex relations between similar and antagonistic factors in children and their parents.
Duration: 1965-1967.
Investigator(s): Raymond B. Cattell, Ph.D., Research Professor of Psychology, Laboratory of Personality Group Analysis, and Karl H. Delhees, Ph.D., Assistant Research Professor, University of Illinois, Champaign, Ill. 61820; Arthur B. Sweney, Ph.D., Associate Professor of Psychology, Texas Technical College, Lubbock, Tex. 79409.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: To be published in monograph form.

22-LA-2 SOCIALIZATION

Purpose: To study effects of family role structure upon socialization, social adjustment, and educational achievement of youth in lower and middle class Negro and white families; to determine components of parental roles and their allocation, the extent to which roles are peer or hierarchical, and which are instrumental and which expressive.
Subjects: 300 families, 75 from each of four strata: lower class Negro, lower class white, middle class Negro, and middle class white.
Methods: In each family, both parents and the two oldest dependent children ages 15 to 25 are interviewed extensively in their homes. The County of Los Angeles bounds the frame, which is defined through a process of control beyond stratification, using a three by three Latin square, and racial composition, median family income, and percentage Negro as controls. Size of each of the nine strata obtained serves as a weight in control through stratification. Within each stratum, a cluster design is used, with primary sampling units based on areas of about 90 housing units, with the variance about this value reduced by combining and splitting blocks.
Findings: Pre-test data were analyzed, and the major field operation began October 1, 1967.
Duration: September 1966-August 1968.
Investigator(s): Warren D. TenHouten, Ph.D., Assistant Professor of Sociology, University of California, Los Angeles, Calif. 90024.
Publications: Journal articles planned; reprints will be available from Dr. TenHouten.

22-LC-1 FAMILY SIZE, INTERACTION, AND RELATIONSHIPS

Purpose: To test and extend propositions based on earlier research concerning effects of family size on patterns of family interaction and husband-wife and parent-child relationships.
Subjects: 600 high school students in three high schools and 2,000 mothers of children in the same schools.
Methods: Students and mothers are surveyed and data analyzed.
Duration: June 1965-December 1967.
Investigator(s): F. Ivan Nye, Ph.D., Professor of Sociology, Washington State University, Pullman, Wash. 99163.
Publications: To be submitted to a sociological journal.

22-LC-2 AN EXPLORATION OF POSSIBLE RELATIONSHIPS AMONG FAMILY VARIABLES AND SCHOOL ADJUSTMENT OF FATHER-ABSENT EIGHTH GRADE BOYS

Purpose: To investigate possible relational patterns between selected home variables and school adjustment when the father was absent from the home.
Subjects: Father-absent eighth grade boys in five midwestern cities; their mothers.
Methods: A self-perception measure of adjustment was administered to all eighth grade father-absent boys in the five cities, and highest and lowest thirds were chosen for study. Further screening eliminated those who had moved, had marked the questionnaire incorrectly, whose fathers had returned, or whose mothers had remarried. Mothers of the remaining boys were interviewed in their homes.
Findings: Mothers' positive perceptions of their present situation and actual cooperation of the sons in household tasks were significantly related to high ranking of boys on the school adjustment measure.
Duration: December 1965-January 1967.
Investigator(s): Kathryn E. Kopf, Ph.D., Assistant Professor, Department of Home Economics, University of Iowa, Iowa City, Iowa 52240.

22-LC-3 A DESERTION TYPOLOGY BASED ON A STUDY OF AFDC INCOMPLETE HOUSEHOLDS IN FIVE UPSTATE NEW YORK COUNTIES

Purpose: To explore the processes and problems associated with fatherless home situations in the Aid to Families with Dependent Children Program.
Subjects: 61 AFDC recipients residing in 56 fatherless households in five upstate New York counties.
Methods: A case schedule content analysis was made of approximately 123 questions obtained from an examination of active case records on file in the county public welfare offices, and a questionnaire of approximately 196 items was administered to the AFDC mothers in a home interview.
Findings: The modal AFDC mother had 3.7 children, had been deserted by her husband four years before and had begun to receive welfare help about nine months later. She had approximately 10 years of education and had been working within the last two years. Eighty-two percent had lived in the county of residence for over five years, and 78 percent had been born in the State. Close relatives provided tremendous within-family support for the ruptured household. The majority of families had little or no contact with other social welfare agencies outside of the local county welfare department. The welfare benefit was not seen as a

triggering process in the rupture of the family. Rather, the factors leading to desertion by the father had crystallized over a long period of time in which the gaps and deficiencies of socialization in each of the respective parent's childhood had provided them with the thinnest of personal resources to meet and cope with the onrushing and complex responsibilities of family living. After the father deserted, the mother felt isolated, was fearful of the world outside her home, and felt that the community did not really sanction her need to be on public assistance. The AFDC mothers were not basically making complaints about the minimal financial benefits. Rather, they were requesting extended social services in terms of counseling on problems of home management, personal concerns for their children, and solutions to housing and acute concerns caused by their having to assume both parental roles. Fifty-one percent stated they had severe health problems.
Duration: October 1966-May 1967.
Investigator(s): Donald L. Cohen, M.S.W., Associate Professor, State University of New York Graduate School of Social Welfare, Albany, N. Y. 12203.
Cooperating group(s): State Department of Social Services.
Publications: Article planned in Social Work and other journals.

22-LD-1 BEHAVIOR AND PERSONALITY OF MOTHERS AND CHILDREN IN WELFARE AFDC FAMILIES

Purpose: To investigate the development and presence of psychiatric impairment in children of families receiving funds under the Aid to Families with Dependent Children Program (AFDC).
Subjects: 1,000 AFDC families.
Methods: Survey focuses on psychiatric impairment in one child in each of the 1,000 families. Mother is interviewed in home, and a psychiatrist rates a computer summary of her description of her child's behavior and symptomatology. One hundred of the children with the most marked or severe impairment are seen in direct psychiatric examination; those in need of psychiatric intervention are referred to the Welfare Department of Psychiatry for treatment. Impairment in various areas of functioning is examined in relation to various aspects of family life, mother's practices, attitudes towards the Welfare Department, economic status, ethnic background, and other variables such as birth control practices and attitudes, mother's work history, current re-training interests, and chronic welfare dependency.
Findings: Children show greater impairment in AFDC families when father is present, less when mother is working; higher levels of serious psychiatric impairment and psychosis are found in children of these families than in the non-welfare children of similar economic levels.
Duration: November 1966-October 1969.
Investigator(s): Thomas S. Langner, Ph.D., Research Associate Professor of Psychiatry (Sociology); Edward L. Greene, M.D., and Joseph H. Herson, M.D., Research Scientists and Clinical Instructors (Psychiatry); Jean Jameson, M.D., Senior Research Scientist (Psychiatry); and Jeanne A. Goff, M.A., Assistant Research Scientist (Psychiatry), New York University Medical Center, 550 First Ave., New York, N. Y. 10016.
Cooperating group(s): Health Research Council and Department of Social Services of the City of New York.
Publications: Publications planned.

22-LF-1 EFFECTS OF PARENTAL MENTAL ILLNESS ON THE CHILDREN

Purpose: To determine extent of risk of psychiatric disorder to children with a mentally ill parent; to explore how and in what circumstances mental illness in one member adversely influences the mental health of other members of the family; to study effects of parental illness on family life and relationships.
Subjects: Total population of psychiatric patients living in a London borough.
Methods: Longitudinal study including measurement of clinical aspects of the psychiatric disorder, social context in which symptoms occur, impact of illness on family life, spouse's attitudes toward the patient and his or her disorder, spouse's mental state, various aspects of family life and relationships, medical and social service contacts, temperamental characteristics of the children, and behavior of children at home and at school. A detailed study of the reliability and validity of the measurement of family pathology and of various aspects of the diagnostic process in child psychiatry is being included.
Duration: Not reported.
Investigator(s): Michael L. Rutter, M.D., Senior Lecturer, Institute of Psychiatry, Maudsley Hospital, Denmark Hill, London S.E. 5, England.
Cooperating group(s): Association for the Aid of Crippled Children.

22-LF-2 EFFECTS OF A MENTAL RETARDATE ON SIBLING BEHAVIOR

Purpose: To determine any pathogenic effects of the presence of a mentally retarded child in the family on the development and behavior of its brothers and sisters.
Subjects: About 200 families newly identified as having a mentally retarded child in the Riverside schools.
Methods: Parents and siblings will be interviewed over a three- to four-year period. Performance data will be obtained from the schools.
Duration: June 1967-June 1971.
Investigator(s): E. Gartly Jaco, Ph.D., Professor of Sociology, University of California, Riverside, Calif. 92502.
Cooperating group(s): Socio-Behavioral Laboratory, Pacific State Hospital, Pomona.
Publications: Journal articles planned.

22-LF-3 POWER RELATIONS IN EMOTIONALLY DISTURBED AND NORMAL FAMILY TRIADS

Purpose: To test several hypotheses about family interaction and schizophrenia drawn from the theoretical writings of the Bateson research group; specifically, that "double-binding" is associated with the development of the schizophrenic thought disorder, and that psychopathology of an individual child is associated with a power struggle between himself and the other members of his family.
Subjects: 60 intact families in which the child is male and in which the parents are the biological parents of the child; 30 families in which the members are normal, and 30 in which the child has been diagnosed as pre-psychotic or borderline psychotic.
Methods: Each family member independently fills out a multiple choice questionnaire. A series of questionnaire items is then selected on the basis of complete disagreement between family members, and members are brought together and asked to discuss the item until a decision is reached which is agreeable to them all. Family discussions are scored by an adaptation of the Bales IPA scoring system.

Duration: June 1967-August 1968.
Investigator(s): Anthony Schuham (Ph.D. Candidate), Research Associate, Medical Care Research Center, Jewish Hospital of St. Louis, St. Louis, Mo. 63103.
Cooperating group(s): Washington University Child Guidance Clinic; Cardinal Glennon Memorial Hospital for Children; St. Louis State Hospital, St. Louis, Mo.; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Progress reports; publication in professional journals.

22-LF-4 ADAPTATION OF ADOLESCENTS TO PATERNAL ALCOHOLISM

Purpose: To identify, study, and describe characteristic modes of adaptation to alcoholism.
Subjects: 60 males, ages 11 to 19, and 60 females, ages 13 to 19, in intact families of male alcoholics.
Methods: Study involves in-depth comparisons of successfully coping adolescents with functionally impaired ones in order to improve knowledge of which adaptational strategies seem to work better and why. Areas of adolescent functioning to be studied are social adjustment, family interactions, and personality. Studies will stress the search for causal factors in the interactional patterns within the family triad composed of adolescent under study and his parents.
Duration: October 1967-October 1971.
Investigator(s): Pauline Cohen, M.S.W., Associate Casework Director, Family Service of the Cincinnati Area, 2343 Auburn Ave., Cincinnati, Ohio 45219.
Cooperating group(s): Department of Psychology, University of Cincinnati; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Plan to publish at conclusion of project.

22-LF-5 SOCIAL WORK PROCESSES IN RURAL CHILD WELFARE SERVICES

Purpose: To discover the forms of ego disturbances which occur among mothers in Southern Appalachia whose care of their children may be marginal or actually neglectful; to test for the kinds of casework intervention most likely to be helpful.
Subjects: Various. This is a program of studies, most of which will be in family units in Western North Carolina and North Georgia.
Methods: Various, depending on the study. Will include: interview surveys; direct observation; psychometric testing; collating medical information; and the Critical Incident technique.
Findings: A preliminary study demonstrated that youngsters from an isolated, mountain community were less verbally accessible than those in a town more in the mainstream.
Duration: March 1965-August 1971.
Investigator(s): Norman A. Polansky, Ph.D., Professor of Social Work and Sociology, and Director, University of Georgia Child Research Field Station, 330 Parkway Office Building, Asheville, N. C. 28801.
Cooperating group(s): Georgia Department of Family and Children's Services; North Carolina Department of Public Welfare; Macon (County) Program for Progress, Inc.
Publications: Several papers in standard journals.

22-LF-6 A PILOT STUDY OF THE MARGINAL MOTHER

Purpose: To gain experience needed in preparation for launching a larger-scale study of the relationship between maternal personality and the child's level of living in Southern, rural Appalachia.
Subjects: 10 mothers nominated by welfare departments in two counties of Western North Carolina as having caused them grave concern about standards of child caring.
Methods: Intensive casework interviewing to gain a thorough social history on the mother; verification of the problem in child rearing in the present or recent past; psychological testing of most of the mothers; "staffing" all cases with our consulting psychiatrist.
Findings: Many of the women fit Ruesch's conception of the "Infantile Personality", i.e., pre-genitally fixated in character development. A tentative typology of the cases includes: (1) mothers who are inadequate personalities and/or were reared with very low standards themselves; (2) impulse-ridden mothers; (3) the Apathy-Futility syndrome; (4) acute psychiatric conditions; and (5) temporarily overwhelmed.
Duration: February 1967-January 1968.
Investigator(s): Norman A. Polansky, Ph.D., Professor of Social Work and Sociology, and Director, University of Georgia Child Research Field Station, 330 Parkway Office Building, Asheville, N. C. 28801; Christine De Saix, A.B., and Mary Lou Wing, M.A., Research Associates in Social Work, University of Georgia School of Social Work, Athens, Ga. 30601.
Cooperating group(s): McDowell County, N. C. and Macon County, N. C. Departments of Public Welfare.
Publications: Paper being prepared for submission to a social work journal.

22-LF-7 CHILDREN'S PROJECT

Purpose: To identify a sample of mentally or emotionally ill mothers resident in deprived urban areas and coming to the emergency room services of two general hospitals; to describe the social and health problems of children in these families; to determine whether and to what extent a planned program of services can mitigate or prevent such problems in one group of children as compared with a suitable case control. (This is the third in a series of studies concerning the impact on children of the mental disturbance of a parent. See Research Relating to Children, Bulletin Nos. 19-RS-1 and 14-U-7.)
Subjects: 35 demonstration and 35 control mothers and their families resident in Boston, Chelsea, Winthrop, and Revere, Mass.
Methods: Demonstration and control families were chosen systematically from mothers seen by the psychiatric emergency services of two large urban general hospitals. Demonstration families received social work services for one year, and this effort was evaluated; family and children's needs were also evaluated by three separate research interviews during the year. Data were obtained from school and community agencies and from pediatric examination of the children.
Findings: Children in these families frequently experienced serious social, emotional, and health deprivations, and were exposed to disturbing and demoralizing experiences in their families and neighborhoods. In general, patients received only emergency psychiatric care with little follow-up by hospitals when they did not return to out-patient clinics as recommended. The Emergency Ward psychiatric reports frequently presented data indicating that the mother's condition presented risks for child care. Families were often characterized by multiple problems presenting great difficulties to the workers, and necessitating a reduction in the previously planned caseload. Coordination of community health, welfare, and educational services was lacking in providing care for these families.

BEST COPY AVAILABLE

Duration: January 1965-December 1967.
Investigator(s): Elizabeth P. Rice, M.S., Associate Professor of Social Work, Emerita, Harvard University School of Public Health, Boston, Mass. 02115. (Reported by Leo Miller, Ph.D., Research Associate in Social Work, Department of Maternal and Child Health, Harvard University School of Public Health.)
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Results of all three studies will be published in book form, possibly in 1968.

22-LG-1 SELF-ATTITUDES OF HOSPITALIZED ADOLESCENTS

Purpose: To identify and explore the self-attitudes of hospitalized boys and girls and their attitudes toward the hospitalization experience; to find promising means of predicting behavior problems and behavior patterns of hospitalized adolescents.
Subjects: Boys and girls, ages 10 to 11, 14 to 15, 18 to 19, and 21 to 22.
Methods: Investigation will focus on attitudes of self-esteem, self- and body-cathexis, desirable patient descriptions, psychosomatic symptoms, depressive effect, self-description, and state of physical independence. Data will be analyzed to determine similarities and differences between subjects classified by sex and age.
Duration: September 1966-August 1968.
Investigator(s): Lois A. Jones, Assistant Professor of Nursing, Department of Pediatric Nursing, Frances Payne Bolton School of Nursing, Western Reserve University, Cleveland, Ohio 44106.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

22-LG-2 THE PREPARATION OF THE PEDIATRIC PATIENT FOR HOSPITAL SCHOOL--A PILOT STUDY

Purpose: To study the type of preparation offered to a group of children admitted to a large general hospital which had a hospital school; to study the relationship between preparation for the hospital and the hospital school and age, race, sex, previous school experience, and reason for hospitalization.
Subjects: 78 children, ages 6 to 16, admitted to the University of Virginia Hospital in Charlottesville, Virginia.
Methods: Each child was personally interviewed with a structured questionnaire administered within the first two days of the hospital stay or when the patient's condition permitted.
Duration: March-May 1967.
Investigator(s): Janet Hammon, M.Ed., Hospital School Teacher, University of Virginia Hospital; Mary Sturdivant, M.N., Instructor, School of Nursing; Frederick L. Greene, M.D. Candidate; and Roger J. Meyer, M.D., M.P.H., Associate Professor, Department of Pediatrics, University of Virginia School of Medicine, Charlottesville, Va. 22901.
Publications: Submitted for publication.

22-LG-3 FAMILY ADAPTATION TO FATAL ILLNESS OF CHILDREN

Purpose: To study family coping strategies, mastery, vulnerability, and interaction in crisis and resolution of crisis; to predict adaptation and vulnerability in relation to crisis.
Subjects: Families with a child fatally ill with leukemia.
Methods: Longitudinal analysis of family interaction, coping strategies, role differentiation, and psychopathology on the basis of standardized ratings of interviews with parents, fatally ill children, and siblings, during different phases of illness and after the death of the child.
Duration: 1966-continuing.
Investigator(s): Edward H. Futterman, M.D., Director, Child Psychiatry Division; Melvin Sabshin, M.D., Head, Department of Psychiatry, Medical Center; and Irwin Hoffman, Research Psychologist, University of Illinois, Chicago, Ill. 60612; Joseph E. Simone, M.D., Pediatric Hematologist, St. Jude's Children's Hospital, Memphis, Tenn.
Cooperating group(s): Department of Pediatrics, University of Illinois.

22-LH-1 STUDIES IN ADOPTION

Purpose: To expand the knowledge of the progress and development of adopted children by common observations in the first year.
Subjects: 100 adopted children and 100 non-adopted children, ages 6 to 12.
Methods: Clinical examination of children and parents and a battery of psychological tests on the parents.
Findings: Parents tested so far show attitudes of overprotection and repression in early childhood and high expectations for the older child. This may account for the observed acting-out behavior disorders.
Duration: 1965-1968.
Investigator(s): Henry H. Work, M.D., Acting Chairman, Department of Psychiatry, and James Q. Simmons III, M.D., Chief, Child Inpatient Service, Neuropsychiatric Institute, University of California School of Medicine, Los Angeles, Calif. 90024.

Child Rearing

22-MB-1 THE BATTERED CHILD SYNDROME--A STUDY OF CHILD-REARING PRACTICES

Purpose: To investigate the attitudes and feelings of parents regarding child-rearing practices; to help in differentiating the psychological factors within the family milieu which contribute to the physical abuse of children.
Subjects: Families of abused children; control group of normal families.
Methods: Experimental and control families are compared on a series of scales designed to measure attitudes and feelings related to a variety of child-rearing behavior practices. In addition, 80 items of factual information regarding a wide variety of personal information on the families will be gathered and prepared for computerizing. Analysis of variance and factor analysis will be used to study the data.
Duration: July 1966-1970.

Investigator(s): Morris J. Paulson, Ph.D., Assistant Professor of Medical Psychology, University of California Medical Center, Los Angeles, Calif. 90024.
Publications: *Trauma* and three other articles in press, 1967.

22-MB-2 THE APATHY-FUTILITY SYNDROME IN CHILD NEGLECT

Purpose: To investigate the relationship between maternal personality and the adequacy of care given the young child; specifically, to investigate the prevalence of the "Apathy-Futility syndrome" and other syndromes among mothers whose children may be regarded as "neglected", and to discover methods of treating these situations via social work intervention.
Subjects: 60 to 100 mother-child pairs drawn from a year-round Head Start Program. Children are about five years of age and living with their own mothers in rural Southern Appalachia.
Methods: Mother and child are studied intensively through casework interviews, observation, and psychological testing. Data will be analyzed by cluster techniques, seeking correlations among factors indicative of levels of maternal maturity and child caring offered. Special scales have been developed in an attempt to measure the childhood level of living and the maternal characteristics.
Duration: June 1967-August 1968.
Investigator(s): Norman A. Polansky, Ph.D., Professor of Social Work and Sociology, and Director, University of Georgia Child Research Field Station, 330 Parkway Office Building, Asheville, N. C. 28801; Christine De Saix, A.B., Betty Jane Smith, M.S.W., and Robert Borgman, A.B., Research Associates in Social Work, University of Georgia School of Social Work, Athens, Ga. 30601.
Cooperating group(s): Macon Program for Progress, and Department of Public Welfare, Macon County, Franklin, N. C.
Publications: Indefinite.

22-MB-3 CHILD-REARING PRACTICES AMONG SELECTED CULTURALLY DEPRIVED MINORITIES

Purpose: To determine whether values related to child rearing differ among Papago Indian, Mexican-American, and Anglo lower class cultures.
Subjects: 50 Anglo, 50 Mexican-American, and 50 Papago Indian mothers residing in the metropolitan urban area of Tucson, Arizona.
Methods: Trained interviewers who were members of the cultural groups being studied interviewed each mother in a private session, using an adapted form of the interview schedule developed by Sears, Maccoby, and Levin (1957). Responses were compared.
Findings: Chi-square tests indicate that significant differences exist in the child-rearing practices of the three groups, the Papago Indians being the most permissive, the Anglos the harshest, and the Mexican-Americans in between.
Duration: October 1965-Spring 1967.
Investigator(s): Bessie Jean Ruley, Ph.D., Associate Professor, School of Home Economics, University of Arizona, Tucson, Ariz. 85721.
Publications: Plan to publish in *Journal of Genetic Psychology*.

22-MB-4 REINFORCEMENT OF CHILD BEHAVIOR IN THAILAND

Purpose: To discover which behaviors are praised and punished, who does the praising and punishing, and the type of punishment given to Thai, Chinese, Muslim, and children of differing regions of Thailand.
Subjects: 1,784 Thai children in grades one and four.
Methods: Children were interviewed in their native language by Thai interviewers. Findings will be compared with data to be collected from American children.
Duration: June 1965-September 1967.
Investigator(s): Jack A. Shaffer, Ph.D., Professor of Psychology, Humboldt State College, Arcata, Calif. 95521; Elmer Sundby, Ph.D., Associate Professor of Psychology, North Central College, Naperville, Ill. 60540; Chirapa Boonyapisit, M.A., Instructor in Psychology, Thammasat University, Bangkok, Thailand.
Cooperating group(s): The Asia Foundation.
Publications: Plan a monograph of the Faculty of Liberal Arts of Thammasat University; also plan to submit to Child Development, Journal of Personality and Social Psychology, or Journal of Social Psychology.

22-MB-5 DEFINING THE CONCEPT, "CHILD NEGLECT"

Purpose: To explore concrete actions or failures to act which are taken commonly, by at least some professionals, as evidences of "concern-evoking" behavior. Despite intense interest in child neglect, and related phenomena of inadequate or marginal mothering, there is no agreed-upon definition of this, either legal or, more seriously, professional. Definitions that exist are at a useless level of abstraction.
Subjects: 95 public welfare workers and public health nurses from North Georgia and Western North Carolina, all in Appalachian counties.
Methods: To avoid influencing dimensions of response, while seeking concrete illustrations, we employed a variant of Flanagan's Critical Incident technique. The critical question is, "Tell me about an instance of parental behavior which left you very concerned for the welfare of the child or children". All data are from own direct experience, rather than hearsay, preferably. Data are analyzed by developing a code empirically, testing intercoder reliability, then comparing between professional groups, and across state line, looking for differences in perceptions which may exist.
Findings: Data being analyzed, but it is already evident there will be few significant differences between perceptions of welfare workers and nurses in these rural areas. Other findings too detailed for summarization here.
Duration: July 1967-February 1968.
Investigator(s): Norman A. Polansky, Ph.D., Professor of Social Work and Sociology, and Director, University of Georgia Child Research Field Station, 330 Parkway Office Building, Asheville, N. C. 28801; Mary Lou Wing, M.A., Research Associate in Social Work, University of Georgia School of Social Work, Athens, Ga. 30601.
Cooperating group(s): Officials of the Georgia and North Carolina Child Welfare and Public Health Departments.
Publications: Plan to submit paper, tentatively titled "Toward Defining Child Neglect", to a social work journal.

22-MB-6 CROSS-CULTURAL STUDIES OF CHILD REARING

Purpose: To study the effects of social pressure on school children in the Soviet Union, Hungary, Czechoslovakia, and Switzerland; to investigate patterns of family upbringing in these countries.
Subjects: 12-year-old children representing a wide variety of socio-economic backgrounds: 165 Russians, 800 to 1,000 Hungarians, and others.
Methods: Questionnaires are administered to subjects through their schools. Both boarding and day schools have been sampled in the Soviet Union and Hungary. This research replicates investigations previously conducted in the U.S.S.R., England, and the U.S.
Duration: 1959-1971.
Investigator(s): Urie Bronfenbrenner, Ph.D., and Edward C. Devereux, Jr., Ph.D., Professors; Robert R. Rodgers, Ph.D., Research Associate, Department of Child Development and Family Relationships, Cornell University, Ithaca, N. Y. 14850.
Cooperating group(s): National Science Foundation.
Publications: *International Journal of Psychology* 2:3:199-207, 1967; *Saturday Review*, October 7, 1967, pp. 60-66.

22-MB-7 INTELLIGENCE AND INADEQUATE MOTHERING

Purpose: Previous research has shown that groups of "neglectful" mothers tested, on the average, well below normal intelligence. However, these studies typically did not compare the results with those of comparably tested mothers of similar socio-economic background, etc. This study aims to explore this problem with such a contrast group available.
Subjects: 50 mothers referred by a county department of public welfare for testing: 34 were referred as "neglect" situations, and 16 as good candidates for work program rehabilitation.
Methods: Wechsler Adult Intelligence Scale was the chief instrument on which these particular results are based.
Findings: Over one-third of the mothers referred as neglectful tested below 60 in intelligence, whereas only one of the other 16 tested this low. However, once this retarded group is subtracted, distribution of I.Q.'s among the two groups is suprisingly similar up the rest of the scale, with many of the adequate mothers also testing rather low.
Duration: July 1966-January 1968.
Investigator(s): Robert Borgman, A.B., Research Associate in Social Work, University of Georgia School of Social Work, Athens, Ga. 30601.
Cooperating group(s): Catawba County, N. C. Department of Public Welfare.
Publications: Paper in preparation for submission to social work journals.

SOCIO-ECONOMIC AND CULTURAL FACTORS

22-NB-1 POST-HIGH SCHOOL MIGRATION AND VOCATIONAL CHOICE PATTERNS OF STUDENTS FROM AN ECONOMICALLY DEPRESSED AREA

Purpose: To determine the origin of migration patterns of high school youth; to explore the social characteristics of the environment which relate to consistency or inconsistency between initial aspiration levels and resultant career activities.
Subjects: High school seniors in St. Lawrence County, New York.
Methods: Overall design is longitudinal, utilizing initial data from an earlier study of vocational plans of subjects and following up with a mailed questionnaire to be sent to them three years later. Data will also be obtained from the 18 schools attended by the graduating seniors, and will consist of personal data on the students as well as general information about the school system.
Duration: Not reported.
Investigator(s): John Harp, Associate Professor, Department of Rural Sociology, Cornell University, Ithaca, N. Y. 14850.
Cooperating group(s): State of New York.

22-NB-2 A STUDY OF YOUTH IN HIGH SCHOOL, AT WORK, AND UNEMPLOYED

Purpose: To study important areas of growth and change in adolescent boys, including dimensions of the self, values, attitudes, affective states, behaviors, plans, and aspirations; to relate such growth and change to differences within and between three broad categories of environments--school, work, and unemployment; additionally, to analyze schools as organizations; to test hypotheses derived from self-identity theory; to measure occupational information and its correlates; and to further study the causes of leaving school.
Subjects: 2,600 10th grade boys in public schools throughout the United States, 2,200 of whom constitute a representative cross-section and 400 of whom are drawn from relatively unique school environments.
Methods: Subjects participated in personal interviews and group-administered tests and questionnaires carried out in their schools in Fall 1966; they will be interviewed again in Spring 1968 and in Fall 1969, probably in their own homes. In order to effectively study relationships between growth and change variables and the various environments, it is planned to measure characteristics of persons and environments in terms of identical or commensurate concepts whenever possible. Analyses of data will begin with cross-sectional relationships based on the first data collection; however, the most extensive efforts will be reserved for analyses of changes over time as a function of differences in social environment.
Duration: June 1965-December 1971.
Investigator(s): Robert L. Kahn, Ph.D., Program Director, and Jerald G. Bachman, Ph.D., Study Director, Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, Mich. 48104.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Psychological Reports 20:523-526, 1967; Working Paper 1: Blueprint for a Nationwide Longitudinal Study of Adolescent Boys. Ann Arbor, Mich: Survey Research Center, Institute for Social Research, University of Michigan; additional publications planned.

22-NC-1 MINORITY GROUP SOCIALIZATION IN HIGH SCHOOL

Purpose: To examine political orientations of Negro and white students in Athens, Ga.
Subjects: 72 ninth and 52 twelfth grade white students; 190 ninth and 125 twelfth grade Negro students.
Methods: Data were collected in 1965 in areas including role of the school in contrast with other societal agencies in transmitting political information, encouraging acceptance of democratic norms, influencing affective political orientations, and stimulating political participation. Differences among the populations and standard socioeconomic variables provide the basis for the analysis.
Duration: 1965-December 1967.
Investigator(s): William J. Crotty, Professor, Department of Political Science, Northwestern University, Evanston, Ill. 60201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-NC-2 MORAL ORIENTATIONS AMONG STUDENT ACTIVISTS

Purpose: To discover moral orientations distinctive to late adolescents (college-age) who engage in various forms of pro-social action; to characterize subjects in terms of biographical data and self-descriptions of actual and ideal self; to identify retrospectively those antecedents in child rearing and parent-child relations that characterize the activists and the adolescents who are selected to typify different sorts of moral orientation.
Subjects: University of California undergraduate students arrested as participants in the Berkeley campus events of 1964; Berkeley undergraduates active in Republican, Democratic, and "New Right" organizations and a comparable cross-section from the same population; undergraduate activists in several organizations at San Francisco State College and a comparable cross-section sample; participants in several Peace Corps training programs.
Methods: Moral orientations were assessed with satisfactory reliability by a written form of Kohlberg's methods, involving the person's reasoning concerning grounds for his resolution of several moral dilemmas. Parent-child relations were assessed for mother and father by a Q-sort.
Duration: January 1966-March 1968.
Investigator(s): M. Brewster Smith, Ph.D., Professor of Psychology and Director, Jeanne H. Block, Ph.D., and Norma Haan, M.S., Research Psychologists, Institute of Human Development, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.

22-NE-1 PORTRAITS OF THE INNER-CITY CHILD

Purpose: To investigate case studies of urban children not officially diagnosed as "disturbed".
Subjects: Children, ages 5 to 12, attending urban schools.
Methods: Extensive interviews of school personnel; review of school records; and full clinical evaluation by psychologist, psychiatrist, psychiatric social worker, and pediatrician.
Duration: September 1966-September 1967.
Investigator(s): Donald H. Clark, Ph.D., Director, Educational Clinic, Hunter College, City University of New York, Bronx, N. Y. 10468.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Results to be published in book form, 1969.

22-NE-2 THE INFLUENCE OF ARCTIC URBANISM ON BAFFIN ISLAND ESKIMO CHILD LIFE AND CHILD REARING

Purpose: To study the effects of the transitional and incipient urbanism in the Eastern Arctic on family life; to study the schools, health services, communication media, religious institutions, and economic institutions as agents of socialization in town living.
Subjects: Approximately 1,000 Eskimos living in Frobisher Bay, N.W.T., Canada and 1,000 Eskimos living in and around other Baffin Island settlements.
Methods: Participant observation of Eskimo family life, including: living in town with acculturated Eskimo family; hunting with "traditional" Eskimo family; attendance at all community events; interviews of institutional agents such as teachers, ministers, doctors, etc.; utilization of school records and Canadian government publications.
Findings: There is a consistent trend among Baffin Island Eskimos to move into urbanized areas, to accept acculturative influences favorably, and to prepare their children for a changed culture. Numerous radical changes in child rearing and style of child life have been noted in field work.
Duration: June 1967-1970.
Investigator(s): Ann P. McElroy, Ph.D. Candidate, Department of Anthropology, University of North Carolina, Chapel Hill, N. C. 27515.
Cooperating group(s): National Science Foundation; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned for Summer 1968; information available from Institute for Research in Social Science, University of North Carolina.

22-NE-3 SOCIAL MOBILITY, MATERNAL PRACTICES, AND SCHOOL ACHIEVEMENT OF NEGRO AND WHITE CHILDREN

Purpose: To make a comparative study of the processes of upward mobility among Negro and white families; to identify patterns of change in family structure and maternal practices that promote higher school achievement in children; to compare the channels of influence that promote and hinder the diffusion of maternal practices functional for achievement among upwardly mobile white and Negro mothers; to ascertain which variables of family structure differentiate upward mobiles from non-mobiles.

Subjects: 1,000 mothers of fifth and sixth grade children, Negro and white, working class and middle class, will be obtained through schools in white, Negro, and integrated neighborhoods in Chicago, Evanston, and Gary.
Methods: Interviews will be held with the mothers; I.Q., grades, and achievement test scores of the children will be obtained from schools; the effects of such variables as color, class position, class origin of parents, I.Q., sex, and ordinal position of children, and attributes of family structure such as fertility, presence of father, and maternal dominance will be ascertained.
Duration: August 1967-August 1970.
Investigator(s): Zena Smith Blau, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Cooperating group(s): Research Grants Branch, Office of Research and Demonstrations, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: To be published in professional journals.

22-NF-1 PREJUDICE AND OTHER INTERRACIAL ATTITUDES OF NEGRO YOUTH

Purpose: To investigate the nature and extent of prejudice among male and female Negro high school seniors and dropouts; to account for variations in attitudes on basis of personal background, personal experience, and school desegregation.
Subjects: 582 Washington, D. C. youth: 471 in school and 111 dropouts.
Methods: Subjects were asked about their willingness to associate with whites in diverse interracial situations through the use of a group-administered questionnaire; attention was given not only to the kind of group involved, such as church, school, or club, but also its racial composition.
Findings: Not as much "race prejudice" (defined here in terms of willingness to associate) as anticipated; degree of willingness to associate with whites varies with situation, school status of respondent, extent of informal voluntary experience with white fellow-students, and kinds of whites involved.
Duration: May 1966-August 1967.
Investigator(s): Sophia F. McDowell, Ph.D., Assistant Professor of Sociology, Howard University, Washington, D. C. 20001.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-NG-1 CHILD'S VIEW OF HIS CULTURE: LATIN-AMERICAN, ANGLO, AND NEGRO

Purpose: To use children as informants on their view of their culture, and to evaluate this view in terms of more conventional cultural studies, and facets of culture selected or rejected by children; to determine existence of a pattern in the selectivity of children.
Subjects: Children in grades one to six in three low income areas, representing Anglo, Latin-American, and Negro sub-cultures.
Methods: The three sub-cultures were compared on the basis of data obtained from a formal interview schedule covering daily routine, school activities, school and parental discipline, life aspirations, and attitude toward peers, which was administered individually. In addition, the Latin-American child's view was appraised in context of a larger study of children of Mexican origin in Houston.

Findings: Marked differences are emerging in the extent and nature of family influence, attitudes toward school, and achievement.
Duration: Spring-Fall 1967.
Investigator(s): Mary Ellen Goodman, Ph.D., Professor of Anthropology and Sociology, and Alma T. Beman, B.A., Graduate Student of Behavioral Science, Rice University, Houston, Tex. 77001.

22-NG-2 PROBLEM CHECKLIST RESPONSES OF ADOLESCENTS IN THREE ETHNIC GROUPS

Purpose: To study differences in perceived personal problem areas of adolescents in different cultures attending the same school system.
Subjects: Ninth grade students of Anglo, Indian, and Spanish descent in Gallup-McKinley school system from 1965-66 to 1966-67.
Methods: A 61-item problem checklist is administered anonymously to subjects with a chi-square analysis of the items.
Findings: Navajo adolescents appear more concerned with basic problems of self-worth, money, etc., while Anglos are more concerned with social success.
Duration: September 1966-June 1968.
Investigator(s): Harry L. Saslow, Ph.D., Department of Behavioral Sciences, New Mexico Highlands University, Las Vegas, N. Mex. 87701.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Paper presented at Rocky Mountain Psychological Association Meeting, 1966; publication planned.

22-NG-3 STUDY OF THE "GAMINES" IN BOGOTÁ

Purpose: To obtain generalities with which to understand the life of 3,000 to 5,000 "gamines", homeless children ages 5 to 14, whose activity oscillates between delinquency, vagrancy, neglect, and rebelliousness.
Subjects: 10 typical "gamines" and 10 deprived children who are not "gamines".
Methods: Children were studied by two social workers, two psychologists, three psychiatrists, and a sociologist-interviewer using a psychological and social methodology of the naturalistic sociology type.
Duration: Not reported.
Investigator(s): José Gutiérrez, M.D., Calle 71, No. 5-58, Bogotá, Colombia.
Cooperating group(s): Foundations' Fund for Research in Psychiatry.
Publications: Infancia de la Miseria, March 1967.

EDUCATIONAL FACTORS AND SERVICES

General

22-OA-1 PROJECT SEARCH: A FIVE-YEAR FOLLOW-UP STUDY OF DROPOUTS AND GRADUATES FROM SEQUOIA UNION HIGH SCHOOL DISTRICT SCHOOLS

Purpose: To determine (1) activities of dropouts and graduates after leaving high school; (2) reactions of dropouts and graduates to curriculum and counseling as they exist in our schools; (3) reasons for dropping out of high school and social, economic, and family factors involved; and (4) occupational opportunities available to high school graduates and dropouts.
Subjects: Approximately 500 dropouts and 1,700 graduates.
Methods: Four questionnaires are sent to subjects the first year, and one questionnaire each year thereafter. Personal interviews are held with as many participants as possible. A survey is made of opportunities available in local industry.
Duration: June 1963-June 1968.
Investigator(s): Evelyn T. Donaldson, M.Ed., Project Coordinator, Department of Guidance and Research, Sequoia Union High School District, 480 James Ave., Redwood City, Calif. 94063.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Counselor's Guide to Local Employment and Career Opportunities, June 1967; Interim Report on High School Dropouts, April 1967; Second Interim Report on Graduates, April 1966; First Interim Report on Graduates, April 1965. Available from Department of Guidance and Research.

22-OB-1 THE VALIDITY, RELIABILITY, AND FAVORABILITY OF SELECTED INDICATORS OF BEHAVIORAL CHANGE IN CHILDREN

Purpose: To investigate the merit of a large group of psychometric items as indicators of behavioral change in children; to provide a means for assessing the effect of guidance upon the personal adjustment of elementary age students.
Subjects: Elementary school children.
Methods: A 945-item schedule was established describing changes which might occur in a child's behavior as the result of counseling. Data are collected to determine the validity of these items for predicting successful counseling outcome, their favorability or social desirability, and the reliability of favorability ratings.
Findings: Results should prove valuable for providing objective means for assessing effect of child guidance, and in stimulating research interest in outcome studies and the evaluation of guidance programs.
Duration: Not reported.
Investigator(s): Logan Wright, Ph.D., Director of Psychological Services, University of Oklahoma Medical Center, Oklahoma City, Okla.; Richard Nelson, Assistant Professor, Department of Education, and Fae

H. Spurlock, M.D., Psychiatrist, Student Health Center, Purdue University, Lafayette, Ind. 47907.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-OB-2 USE OF STRUCTURED GROUP COUNSELING FOR PARENTS OF PRE-DELINQUENT AND/OR EMOTIONALLY DISTURBED CHILDREN

Purpose: To estimate the value of guidance for parents of children just beginning to show symptoms of pre-delinquency or emotional disturbance but not needing therapy.
Subjects: Parents referred by school nurse, county agencies, school principals, school guidance systems, and welfare and attendance officers.
Methods: Parents are taught rudiments of discipline, etc., and then allowed to discuss their own situations within the group.
Findings: Parents referred by welfare and attendance officers tend not to come unless pressured. Biggest problem is getting parents to accept the program; once there, they do well. School data on children confirm improvement.
Duration: 1964-continuing.
Investigator(s): Lorna M. Forbes, M.D., Psychiatrist, Guidance Department, Pomona Unified School District, Pomona 91767; and Associate Clinical Professor of Child Psychiatry, University of Southern California Medical School, Los Angeles, Calif. 90033.
Cooperating group(s): PTA Council of Pomona.
Publications: Plan to publish in 1968.

22-OF-1 SIMULATION GAMES IN THE CLASSROOM

Purpose: To develop simulation games for use in elementary and secondary schools; to field-test such games in a wide variety of settings; and to evaluate learning effects of games.
Subjects: Elementary, high school, and college students, and adult groups, all representing a wide range of socio-economic, ability, and interest levels.
Methods: Controlled experiments where possible through necessarily open-ended and exploratory tests.
Findings: Games have positive effects upon motivation, content and intellectual learning, and attitudes toward self, school, and learning.
Duration: July 1962-continuing.
Investigator(s): James S. Coleman, Ph.D., Professor of Sociology, and Sarane S. Boocock, Ph.D., Research Associate, Department of Social Relations, Johns Hopkins University, Baltimore, Md. 21218.
Cooperating group(s): Carnegie Corporation; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Simulation Games and Learning Behavior, S. S. Boocock and E. O. Schild (Eds.). Beverly Hills: Sage Publications, 1967; American Behavioral Scientist, October and November 1966; Sociology of Education 39:215-236, Summer 1966; others.

22-OF-2 RESEARCH STUDY OF LEARNING DISABILITIES

Purpose: To derive criteria for early identification and diagnosis of children with learning disabilities by determining the most sensitive and valid behavioral and medical indicators.
Subjects: Public school children in grades three and four.

Methods: Children are screened to identify those with learning disabilities. These underachievers and an equal number of "normal" children are evaluated intensively to validate the screening procedures and to determine whether there is evidence of brain dysfunction.
Duration: June 1965-May 1969.
Investigator(s): Helmer R. Myklebust, Ed.D., Director, Institute of Language Disorders, Northwestern University, Evanston 60201; and Benjamin Boshes, M.D., Chairman, Department of Neurology, Northwestern University School of Medicine, Chicago, Ill. 60611. (Reported by Otis D. Turner, Chief, Program Studies, Neurological and Sensory Disease Control Program, Public Health Service, U. S. Department of Health, Education, and Welfare, 4040 N. Fairfax, Arlington, Va. 22203.)
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned.

22-OF-3 THE RELATION OF SEX ROLE TO ACHIEVEMENT

Purpose: To investigate the degree to which children view different types of achievement as sex-typed and the relation of these views to achievement motivation; to determine whether boys and girls value different types of reinforcement for achievement efforts.
Subjects: Primarily elementary school children; some adolescents.
Methods: Children's sex role concepts of different types of achievement are measured by presenting pictures representing reading, arithmetic, etc., and asking them whether they consider the activity more boyish or girlish. Measures of achievement motivation consist of questionnaires tapping the value and expectation of success in each achievement area and of behavioral indices such as persistence. Effects of different types of social reinforcement or non-reinforcement are measured by changes in rate of response on a digit-letter task.
Findings: Children generally have higher expectancies of success on a task presented as feminine than on a masculine task. Children view reading, artistic, and social skills as feminine, and arithmetic, athletic, and mechanical skills as masculine. Boys show an increase in effort when their work is criticized, while girls show a decrease. Both sexes show large increases when they are praised.
Duration: January 1967-continuing.
Investigator(s): Aletha Stein, Ph.D., Assistant Professor, Department of Child Development and Family Relationships, Cornell University, Ithaca, N. Y. 14850.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to a psychological journal concerned with personality research.

22-OF-4 SOCIOLOGICAL INFLUENCES UPON THE ACHIEVEMENT OF LOWER CLASS NEGRO CHILDREN

Purpose: To study the relationships between the schools and the social structure of a virtually all-Negro suburb of a northern metropolis: specifically, to study the nature and effects of economic deprivation upon school children, the school-family relations, and school-community relations and school politics.
Subjects: 226 children from grades four and six; their teachers and school officials; 89 percent of their mothers or female guardians.

Methods: Data on familial support for achievement were gathered from interviews with parents, questionnaires filled out by children, and school records. Study on effect of school-family relations on achievement relied primarily on informal conversations with teachers and information they provided about nature and extent of their contacts with parents. School-community relations were explored through semi-structured interviews with local actors in school affairs, collection of election documents, and use of newspaper reports.
Findings: Although family background clearly was related to achievement, the relationship was much weaker than had been suggested by the cultural deprivation literature and by local teachers. Most parent-teacher contacts were found to be initiated by the teachers when the children were doing poorly. Extensive conflicts between "old-timers" and reformers within the community were found to center on control of the local school board.
Duration: February 1966-December 1967.
Investigator(s): Robert J. Parelius, Ph.D., Assistant Professor, Department of Economics and Sociology, Douglass College, New Brunswick, N. J. 08903.
Cooperating group(s): The Center for the Study of Social Organization, University of Chicago; Institute for Juvenile Research, Chicago; Office of Education, U. S. Department of Health, Education, and Welfare.

22-OF-5 FAMILY PRESS AND EDUCATIONAL DEVELOPMENT

Purpose: To explore the relationship between students' academic growth over a four-year period and family press (process variables) within and between socio-economic strata (status variables).
Subjects: Random sample of students in the fifth and seventh grades in 1961, and tested again in 1965, drawn from a nationwide sample of 40,000 students, who are the subjects in a Growth Study of the Educational Testing Service.
Methods: Analysis of covariance technique and Johnson-Neyman test of significance were used to assess the effect of family press on academic growth within and between socio-economic strata.
Duration: January-September 1967.
Investigator(s): Donald L. Lantz, Ph.D., Associate Professor of Educational Psychology, College of Education, University of South Florida, Tampa, Fla. 33620; and Thomas L. Hilton, Ph.D., Senior Research Psychologist, Educational Testing Service, Princeton, N. J. 08540.
Publications: Research Bulletin will be available from investigators.

22-OF-6 A COMPARISON OF HYPERACHIEVING LOWER CLASS FIRST GRADE PUPILS WITH UNDERACHIEVING COUNTERPARTS

Purpose: To identify characteristics in the backgrounds of hyperachieving lower class first grade pupils which differentiate them from a matched group achieving at typically reduced level for culturally disadvantaged pupils.
Subjects: 31 pairs of lower class hyperachievers and a control group matched for sex, classroom, and I.Q., all from a population of 687 first grade children in Buffalo, N. Y. public schools.
Methods: Subjects are differentiated on the basis of the Gates-McGinitie Reading Test into two groups of 31 each, hyperachievers and the typically slow (for the lower class) in beginning reading. Data concerning home conditions are derived from PARI, and teachers are asked to appraise aspects of the children's backgrounds.

Duration: January-December 1967.

Investigator(s): Delcenia Powell, Ed.D. Candidate, Department of Elementary Education, Texas Southern University, Houston, Tex. (Reported by William Eller, Ph.D., Chairman, Elementary Education Department, School of Education, State University of New York, Buffalo, N. Y. 14214.)

Publications: Dissertation will be available.

22-OF-7 COPING STYLES AND ACHIEVEMENT: A CROSS-NATIONAL STUDY OF CHILDREN

Purpose: To investigate the ways in which children deal with certain kinds of problems in and out of school; to show how this relates to their achievement in school, and to their educational and occupational aspirations and expectations; to investigate these areas across nations for similarities and differences.

Subjects: 800 male and female upper-middle and upper-lower class children, ages 10 and 14, in seven countries; parents of 10 percent of the sample.

Methods: Ten paper and pencil tests are applied in class to all subjects and analyzed for coping style and attitude toward achievement, interpersonal relations, authority, anxiety, and aggression; peer evaluation instrument is analyzed for these areas also. The educational and occupational aspiration and evaluation instruments are compared with the coping style data and supply additional material on children's attitudes and knowledge in these areas. The interviews with parents are aimed at getting similar information about the children.

Duration: June 1965-June 1970.

Investigator(s): Robert F. Peck, Ph.D., Professor of Educational Psychology, University of Texas, Austin, Tex.; and Robert J. Havighurst, Ph.D., Professor of Education, University of Chicago, Chicago, Ill. 60637. (Reported by Guy J. Manaster, University of Chicago.)

Cooperating group(s): Universities at the foreign stations; Office of Education, U. S. Department of Health, Education, and Welfare.

Publications: Plan to publish at completion of analysis.

22-OF-8 PROBLEMS OF SLOW LEARNERS

Purpose: To empirically establish incidence and prevalence of classroom problems attributed to slow learners.

Subjects: 2,500 public school students in grades two through seven, and nine.

Methods: Teachers were asked to indicate, on a specially designed instrument, which children in their class had problems in each of the 16 problem areas selected. Data on I.Q., birthdate, race, etc., were then collected, and prevalence of problems among slow learners (I.Q. 70-90) was calculated.

Findings: Preliminary findings indicate most problems generally attributed to slow learners are actually more often found among this population than among "normals".

Duration: February-November 1967.

Investigator(s): John F. Jacobs, M.Ed., Doctoral Fellow, Myron A. Cunningham, Ed.D., Professor, and Marnell L. Pierce, M.Ed., Instructor, College of Education, University of Florida, Gainesville 32601; Arnold D. Cortazzo, Ed.D., Director, Sunland Training Center, Miami, Fla.

Cooperating group(s): Florida Educational Research and Development Council.

Publications: To be published as a monograph by Florida Educational Research and Development Council.

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22-OF-9 SOME SOCIAL DETERMINANTS OF ACADEMIC SUCCESS AMONG CULTURALLY DISADVANTAGED NEGRO CHILDREN

Purpose: To identify factors that contribute to academic success among culturally disadvantaged Negro children.
Subjects: 56 sixth grade children living in two of the lowest income areas of an urban setting; their mothers or guardians.
Methods: The social determinants of academic success, namely, the family structure, aspirational level, and self-concept, were measured by a designed children's questionnaire, the North-Hatt Scale, the Davidson and Lang Self-Concept Scale, a parental questionnaire, and interviews.
Findings: Self-image of the Negro child is not related to his academic achievement. There is no relation between academic success and having both parents in the home.
Duration: 1966-1967.
Investigator(s): Bonita Franks, Ph.D., University of Tennessee, Knoxville, Tenn. 37916. (Reported by John D. McAulay, Ed.D., Professor of Elementary Education, Pennsylvania State University, University Park, Pa. 16802.)
Cooperating group(s): Department of Elementary Education, Pennsylvania State University.
Publications: Unpublished doctoral dissertation available at Pattee Library, Pennsylvania State University.

22-OK-1 A STUDY OF CHANGE AGENTS: NEGRO STUDENTS WHO ARE DESEGREGATING ALL-WHITE SCHOOLS IN THE DEEP SOUTH

Purpose: To investigate social backgrounds, personality characteristics, decision-making processes, and experiences of selected Southern Negro youngsters who have desegregated previously all-white public schools.
Subjects: Approximately 100 Negro students in desegregated schools, their families, and teachers throughout rural and urban areas of Alabama; control sample of Negro students from similar backgrounds who are not attending desegregated schools.
Methods: Interviews were conducted and analyzed, and comparisons made between the two groups to clarify personal and social characteristics of educational and community change agents.
Findings: Analysis of interviews should provide a record of perceptions and reflections on the desegregation process in Southern schools, contribute to a better understanding of some of the issues and experiences of social change agents, and yield knowledge helpful to public planning for educational change in the near future. The study has special relevance for the training of Southern teachers to manage desegregated classrooms, and the preparation of Negro and white school and community authorities to work with the desegregation process.
Duration: Completed.
Investigator(s): Dr. Mark Chesler, Instructor in Sociology, and Phyllis Segal, (formerly) Center for Research on the Utilization of Scientific Knowledge, Institute for Social Research, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Specific Skills

22-PB-1 A FOLLOW-UP STUDY OF OFF-CAMPUS STUDENTS WHO ATTENDED THE UNIVERSITY OF FLORIDA READING LABORATORY AND CLINIC

Purpose: To determine the present reading ability of off-campus students who attended the University of Florida Reading Laboratory and Clinic.
Subjects: About 175 off-campus students who attended the clinic during 1957-58 through 1962-63, had at least 10 hours of remediation and a standardized pre-test, and are young enough to still be in school.
Methods: A letter of introduction is sent, and those willing to participate in the study return a card indicating this. They are then sent an untimed standardized test and the Reading Attitude Inventory, which reveals the student's concept of his reading ability and his level of education attained. Statistical analysis is performed on all returned information; reading gains are determined through Residual Gain Technique.
Duration: April-August 1967.
Investigator(s): Evelyn W. Stone, Reading Laboratory and Clinic, University of Florida, Gainesville, Fla. 32601.
Publications: Unpublished dissertation.

22-PB-2 A SUGGESTED METHOD FOR PRE-SCHOOL IDENTIFICATION OF READING DISABILITY

Purpose: To develop relatively simple methods of detecting reading disabilities prior to entrance into first grade.
Subjects: 200 children.
Methods: Subjects are pre-tested on form-copying, tests of reversals and rotations, tests of motor ability, and apparent tests of perceptual ability, and results arranged from lowest to highest scores, divided into quartiles. During the final month of the first year in school, word recognition tests are administered individually and scores examined and compared with pre-test scores to determine if the pupils who scored in the lowest quartile of the pre-tests score in the lowest one-third in word recognition. As an additional evaluation of the modifiability of perceptual skills and their relation to reading abilities, five children in the lowest quartile of pre-tests will be given perceptual training during first grade and scores on word recognition compared with scores of five matched children who do not have the perceptual training.
Duration: Not reported.
Investigator(s): Kenneth R. Newton, Ph.D., Associate Professor, and Beulah B. Murray, Educational Therapist, Department of Psychology, University of Tennessee, Knoxville, Tenn.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Special Education

22-QA-1 DISCOVERY AND GUIDANCE OF SUPERIOR STUDENTS

Purpose: To develop procedures that can be used in high schools to identify academically superior students; to assist parents in the home guidance of these students; and to determine, by follow-up methods, the effectiveness of the procedures employed.
Subjects: 2,400 students: group of freshmen in high school, and group now six years out of high school; 250 freshmen added each year.
Methods: Longitudinal testing; analysis of personal documents; follow-up questionnaires and interviews with parents, school personnel, and students.
Duration: February 1957-1982.
Investigator(s): John W. M. Rothney, Ed.D., Professor of Counseling, and Director, and Marshall P. Sanborn, Ph.D., Associate Professor of Counseling, and Associate Director, Research and Guidance Laboratory for Superior Students, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Several volumes planned.

22-QB-1 DEVELOPMENT AND EVALUATION OF AN EXPERIMENTAL SCHOOL FOR HIGH-POTENTIAL UNDERACHIEVERS

Purpose: To develop and test improved means for educating underachievers.
Subjects: 350 eighth grade underachievers of average or above-average potential.
Methods: Students attend the North Carolina Advancement School for three-month periods, during which an intensive effort is made to correct their educational deficiencies. School focuses on development of basic skills and promotion of attitudes and motivational patterns which lead to effective performance. Fifty classroom teachers assist the staff with preparations and evaluation of the program.
Findings: Experiment will determine which new materials and methods will help to alleviate educational disadvantages in the eighth grade, with emphasis on students of above-average potential who are achieving from one to three grades below national norm. The newly developed and tested materials will be made available for use in other schools.
Duration: Not reported.
Investigator(s): Gordon McAndrew, Director, Learning Institute of North Carolina, 1006 Lamond Ave., Durham, N. C. 27701.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-QC-1 FOLLOW-UP STUDY OF GRADUATES OF TWO SPECIAL EDUCATION PROGRAMS

Purpose: To compare occupational, social, and familial status of graduates from high school programs for educable retardates.
Subjects: 50 graduates of Kent County program, 1960-1965; 150 graduates of Dearborn, Mich. program, 1945-1965.

Methods: Graduates and a few parents are interviewed to complete a questionnaire covering post-school experiences. Items covered included occupational history, parent status, income, post-school education, community participation, family status (marriage, children), etc. Comparisons were made between school systems, and between graduates of Dearborn by five-year periods.
Findings: There are slight differences between the two school programs. The income, marital status, and social participation of graduates of special classes are not significantly different from the general population in mean income, age at marriage, etc.
Duration: September 1966-June 1967.
Investigator(s): Marie Skodak, Ph.D., Consultant, Psychological Services, Dearborn Public Schools, 4824 Lois Ave., Dearborn, Mich. 48126.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to *Journal of the American Association on Mental Deficiency*.

22-QD-1 COMBINED EDUCATIONAL AND PSYCHIATRIC APPROACH TO EARLY PRIMARY GRADE LEARNING PROBLEMS

Purpose: To establish effectiveness of a combination of regular class, three hours weekly of special class, and therapeutic intervention in alleviating early-identified learning problems.
Subjects: First and second grade children in a suburban public school.
Methods: Children are selected by teachers and research staff from records and teachers' behavioral checklist. Some children attend special class only, some attend special class and weekly group therapy sessions with parents, and a control group is selected from clinic rolls for treatment only. Special class consists of a highly individualized educational enrichment and tutoring program, conducted in groups of three to four, by a trained special class teacher. Therapy is modified to allow for reluctance of parents to gain sufficient motivation to ally with the team.
Findings: Cases could be selected, but parents strongly resisted active involvement in program, preferring to deny degree of child's disturbance. Those few cases actually involved in combined approach made highly significant educational gains.
Duration: July 1966-July 1968.
Investigator(s): Jack Slatoff, Ph.D., Chief Psychologist, Douglas A. Thom Clinic for Children, 315 Dartmouth St., Boston, Mass. 12116. (Reported by John B. Nelson III, M.D., Executive Director, Douglas A. Thom Clinic for Children.)
Cooperating group(s): Melrose, Massachusetts public schools.
Publications: Presentation and publication planned.

22-QE-1 EFFECTS OF PROJECT HEAD START ACTIVITIES UPON THE ORAL LANGUAGE DEVELOPMENT OF FIRST GRADE PUPILS

Purpose: To evaluate effects of Project Head Start activities in the enhancement of the oral language development of participant children.
Subjects: First grade pupils: one group of Head Start participants; comparable control group of non-participants.
Methods: Two groups are compared on 20 oral language variables including total number of words in recorded interview transcripts; number and length of phonological units; number and length of sentences; number and length of mazes; number of non-maze words

between mazes; vocabulary diversity (three aspects); vocabulary frequency (three aspects); use of the noun-linking verb-noun sentence pattern; use of partial sentences; number of expressions of tentativeness; number of colorful and vivid expressions; and use of mazes (two aspects).
Duration: Not reported.
Investigator(s): Douglas E. Giles, Ed.D., Lemon Grove School District, 1750 Madeira St., Lemon Grove, Calif. 92045; and Artie A. Daniel, Ed.D., Associate Professor of Education, North Texas State University, Denton, Tex. 76203.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-QE-2 RESEARCH PROPOSAL FOR THE PRE-SCHOOL READINESS CENTERS PROGRAM

Purpose: To evaluate the effectiveness of a pre-school program for disadvantaged children.
Subjects: Disadvantaged children entering first grade with pre-school experience, summer Head Start experience, or no pre-school experience.
Methods: Experimental children are given pre- and post- intelligence tests and tests of personal and social adjustment. School readiness and other tests are administered to all subjects upon entering first grade. Subjects will also be given an achievement test at end of school year.
Findings: Preliminary analysis indicates that children experiencing the pre-school readiness program score significantly higher on the Peabody Picture Vocabulary test and the Metropolitan Readiness test than do children without such experience.
Duration: July 1967-June 1968.
Investigator(s): M. L. Bittner, M.A., Research Director, Readiness Centers Evaluation, Center for the Study of Crime, Delinquency, and Corrections, Southern Illinois University, Edwardsville, Ill. 62025.
Cooperating group(s): East St. Louis School District 189; Division of Research and Evaluation, U. S. Office of Economic Opportunity.
Publications: May submit for publication.

22-QE-3 THE EFFECTS OF CURRICULAR AND ADMINISTRATIVE INNOVATIONS ON ATTITUDE OF CULTURALLY DISADVANTAGED YOUTH

Purpose: The need for identifying the factors related to the attitudes of the culturally different pupil toward achievement and educational institutions, and preparing teachers untrained and unaccustomed to working within integrated schools led to a Special Training Institute on Problems of School Desegregation. Primarily, the purpose was twofold: to determine the effects of a specific educational and social experience, and to train a cadre of new professionals experienced with problems of desegregation.
Subjects: 200 culturally disadvantaged children, grades 4 to 6: 100 Negro, 50 Latin, and 50 Anglo children, about equally divided between boys and girls. All attended the school on a voluntary basis.
Methods: The students were placed in groups of 10 per room, with three teachers per group to handle a curriculum composed chiefly of language arts, mathematics, and human relations. Materials, methods, and administrative schedule were as innovative and individualistic as possible. Scales and tests administered before and after the program are the basis for evaluation. The FORTRAN Program will be used to treat the data by analysis of covariance in which the post-test scores will be corrected for differences in pre-test scores.

Findings: Attendance, attitude, and behavior toward the school indicated the success of teaching approach, material utilized, and organization and administrative innovations. The preliminary analysis between pre- and post-tests of each instrument indicates gain. The data have been submitted to statistical treatment for an analysis of covariance, product-moment correlation, and z test for significance at the .01 and .05 level of confidence.
Duration: June-August 1967.
Investigator(s): Charleta J. Dunn, Ed.D., Assistant Professor, Department of Guidance and Counseling, and John L. Creswell, Ed.D., Associate Professor, College of Education, University of Houston, Houston, Tex. 77004.
Cooperating group(s): St. Thomas University; Texas Southern University; Prairie View A. & M. College; Houston Baptist College; Harris County Community Action Association; Hogg Foundation for Mental Health; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Plan several manuscripts and possibly a monograph including descriptions of materials, methodology, and conclusions.

22-QE-4 REPORT OF THE EFFECTIVENESS OF PROJECT HEAD START, LUBBOCK, TEXAS

Purpose: To measure Project Head Start's effectiveness in preparing disadvantaged children to benefit from educational opportunities.
Subjects: Experimental and control groups matched for characteristics such as ethnicity, income range, parents in home, education of parents, working status of mother, public assistance, type of work of parents, size of household or number of children, care of child during prior year, health of child, parental awareness of health problems, and rural-urban residence.
Methods: Children's grades as indicators of "performance" in and "adjustment" to school work are compared with grades of controls as an objective measurement of Project Head Start.
Duration: Not reported.
Investigator(s): Walter J. Cartwright, Ph.D., Associate Professor, and W. G. Steglich, Ph.D., Professor and Head, Department of Sociology and Anthropology, Texas Technological College, Lubbock, Tex. 79406.
Cooperating group(s): U. S. Office of Economic Opportunity.

22-QE-5 INTERACTION PATTERNS AS A SOURCE OF ERROR IN TEACHERS' EVALUATIONS OF HEAD START CHILDREN

Purpose: To determine whether teachers' inabilities to accurately assess the intelligence and school readiness of Head Start children is a function of the interaction patterns of these children; specifically, to test the hypothesis that those children who exhibit middle class interaction patterns are perceived by the teachers as being brighter than those who do not exhibit such patterns.
Subjects: 40 Head Start children; 40 middle class controls.
Methods: Each child is observed according to a highly structured observation schema by trained observers for five 20-minute periods. The interaction profile is then developed for each child. The 20 Head Start children whose interaction profile is most like that of the middle class will be compared with the 20 whose interaction profile is least similar. Stanford-Binet and Caldwell inventories administered to all Head Start children will give actual measures of intelligence and school readiness, against which to study teachers' ratings of these variables.

Duration: November 1967-April 1968.
Investigator(s): Monica Holmes, Ph.D., and Douglas Holmes, Ph.D., Director of Research, Associated YM-YWHA's, 33 W. 60th St., New York, N. Y. 10023.

22-QE-6 A PROFILE OF THE HEAD START CHILD, SUMMER 1966

Purpose: To determine actual needs of children enrolled in Head Start centers, and the extent of these needs.
Subjects: 1,350 children enrolled in the 1966 Head Start summer program in Kansas City, Mo.
Methods: Data from individual pupil record cards were recorded and analyzed to determine the need characteristics of the Head Start child during his pre-school experience. Data pertained to location of Head Start center, number of days in attendance, family composition, social behavior based on teacher's rating scale, results of the Caldwell Pre-school Inventory, speech and language development as assessed by speech pathologists, social and psychological services, and location of the kindergarten which the child attended.
Duration: June 1966-June 1967.
Investigator(s): Elizabeth J. Hocker, M.S.W., Research Assistant, Department of Research and Development, Kansas City School District, 1211 McGee St., Kansas City, Mo. 64106.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publications: Mimeographed report available from investigator.

22-QE-7 THE EFFECTS OF HETEROGENEOUS GROUPING AND COMPENSATORY MEASURES ON CULTURALLY DISADVANTAGED PRE-SCHOOL CHILDREN IN ISRAEL

Purpose: To study whether privileged peers can serve as an enriching influence within the framework of a compensatory program for culturally disadvantaged pre-school children.
Subjects: 96 pre-school children in Jerusalem, Israel, born during 1964.
Methods: The subjects will be divided among four pre-schools. One group of 24 culturally disadvantaged children will be assigned to one pre-school. In each of the others there will be eight culturally disadvantaged and 16 privileged pupils. The same compensatory measures will be applied in all four pre-schools.
Duration: April 1967-April 1970.
Investigator(s): Dina Feitelson, Ph.D., Lecturer, John Dewey School of Education, Hebrew University; and Sylvia Krown, M.A., Psychologist, Israel Ministry of Health, Jerusalem, Israel.
Cooperating group(s): Israel Ministry of Education and Culture; The Municipality of Jerusalem; Office of International Activities, Office of Research and Demonstrations, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Articles planned in appropriate journals.

22-QE-8 DEVELOPMENT OF VERBAL SKILLS FOR CULTURALLY DEPRIVED CHILDREN

Purpose: To demonstrate that verbally mediated discrimination enhances the learning and retention of two separate classes of responses in culturally disadvantaged elementary school children.

Subjects: Culturally disadvantaged school children, ages 10 to 12.
Methods: Subjects are randomly assigned to five groups of 30 each. Each group is given a type of mediated generalization-discrimination training, and all groups will receive the same treatments in interpolated learning and in the test for retention. Measures of learning used include number of responses and latency to the criterion of five out of seven correct responses. Second phase of project will involve more complex concepts and hierarchical relationships. Data will be analyzed by a one-way analysis of variance and covariance. A Neuman-Keuls, Scheffe, or Duncan test will be computed to compare differences among means.
Duration: Not reported.
Investigator(s): Merlin C. Wittrock, Ph.D., Associate Professor of Educational Psychology, and Harold Cook, Post-graduate Research Educationist, Department of Education, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

22-QE-9 A COMPARATIVE PILOT STUDY OF TWO FIRST GRADE PROGRAMS FOR CULTURALLY DEPRIVED MEXICAN-AMERICAN CHILDREN

Purpose: (1) To develop a first grade program in social studies and science for culturally disadvantaged Mexican-American children in which the content is taken from basic concepts in the natural and social sciences; (2) to experiment with methods of teaching the selected content which give major consideration to the cognitive "styles" of all young children and especially culturally disadvantaged ones; (3) to support the development of self-esteem through recognition of independent thinking and attention to the particular needs of individuals; (4) to assist teachers in preparing to use the program; and (5) to compare the language development of children in the experimental program with that of children in regular programs.
Subjects: Six groups of first grade children with 30 in each group, attending two elementary schools located in adjoining districts in a community of culturally disadvantaged Mexican-Americans. Three classes in one school received the enriched program, and the other three, matched for cultural background, chronological age, sex, and readiness test scores, received the regular program.
Methods: Data were derived from pre- and post-tests and classroom observation.
Findings: Results in final report.
Duration: February 1966-May 1967.
Investigator(s): Clyde Inez Martin, Professor of Elementary Education, University of Texas, Austin, Tex. 78712.

22-QE-10 VARIOUS APPROACHES TO BEGINNING READING FOR DISADVANTAGED CHILDREN

Purpose: To discover (1) whether the point at which beginning reading is introduced (kindergarten, first grade, or delayed second grade) affects the reading mastery of disadvantaged children; (2) whether a carefully structured program dealing with perceptual discrimination, language development, and concept formation administered to children prior to the instruction of formal reading improves their later reading facility; (3) the degree to which the regularization of the phoneme-grapheme correspondence in the language is related to reading achievement; (4) the degree to which the relatedness to the life of urban children of the context from which reading materials are drawn affects their reading competence.

Subjects: The study began with 7,000 kindergarten children in 56 New York City elementary schools. As many children as remain within their schools will be followed through the end of third grade. If possible, further follow-up will be made at end of grade six.
Methods: In order to answer the questions listed above, series of materials were found or developed to enable us to view each of the major areas of concern in interaction with each other. Thus some classes began reading by a variety of approaches in the middle of kindergarten, others at the beginning of grade one, and still others had reading postponed until the end of grade one. Some classes began reading in the traditional orthography of normal basal texts, other groups worked with a "linguistic" approach in which only regularly spelled English words were involved, and a third group worked in the i.t.a. For each of these adaptations of time and structure the materials selected were either of the children's own designing, planned to be directly relevant to the experiences of urban slum children, or of general children's interests. In some instances the relatively standard middle class suburban type material was introduced. To assess the effect of an intensive, highly structured pre-reading program emphasizing perception, language, and concept development, a series of specially prepared materials was designed. In all programs teachers were given special training (10 sessions prior to the inception of their entry into the project and six sessions during their participation) in the use of the particular adaptations with which they were involved. Children were pre-tested in the middle of kindergarten and again at the end of kindergarten. In November 1967 a sub-sample of children was once again tested to study the phenomenon of "summer forgetting". At the end of first grade, all children will be tested on materials specifically designed for each program.
Duration: Not reported.
Investigator(s): Miriam L. Goldberg, Ph.D., Professor of Psychology and Education, Beginning Reading Project, Teachers College, Columbia University, New York, N. Y. 10027.

22-QG-1 A STUDY OF THE EFFECTIVENESS OF SELECTED OUT-OF-SCHOOL NEIGHBORHOOD YOUTH CORPS PROGRAMS

Purpose: To evaluate effectiveness and determine potential value of Neighborhood Youth Corps programs on participating non-rural youth who are no longer in school; to evaluate selected program elements in four cities.
Subjects: Participants in Neighborhood Youth Corps programs; control subjects.
Methods: In-depth follow-up studies comparing experimental and control subjects.
Investigator(s): Regis H. Walther, Ph.D., Social Research Group, George Washington University, Washington, D. C. 20006.
Cooperating group(s): Office of Manpower Policy, Evaluation, and Research, U. S. Department of Labor.
Publications: Final report, June 1967.

22-QH-1 KINDERGARTEN INTERVENTION PROJECT

Purpose: To study effect of small classes, teacher aides, supplemental nutrition, and enriched program on school readiness of kindergarten children.
Subjects: 90 children in special program and 90 in a regular kindergarten.

Methods: Children are assigned to experimental program on basis of physical, psychological, visual-perceptual, etc., immaturity and given a markedly enriched program. Emphasis is on verbal skills, concept development, and visual-motor coordination. The more mature half of the class is attending regular kindergarten.
Duration: May 1966-1969.
Investigator(s): Marie Skodak, Ph.D., Consultant, Psychological Services, Dearborn Public Schools, 4824 Lois Ave., Dearborn, Mich. 48126.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to Monographs of the Society for Research in Child Development.

22-QH-2 IDENTIFICATION AND HABILITATION OF INDIAN CHILDREN WITH COMMUNICATION DISORDERS

Purpose: To investigate the incidence and type of communication disorders among Indian school children; to establish a follow-up program to modify effects of these disorders.
Subjects: Students at the Intermountain Indian School, Brigham City, Utah.
Methods: Audiometric screening and assessments; immediate educational adjustments; otological-audiological clinics; educational audiology evaluations; generation of medical-educational-audiological profiles; long-range adjustments in therapeutic and educational programs; educational-audiological services in supervised, graded, demonstration classes.
Duration: June 1967-May 1969.
Investigator(s): Samuel G. Fletcher, Ph.D., Professor and Head, Department of Audiology-Speech Pathology, Utah State University, Logan, Utah 84321.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

22-QH-3 STUDY OF MULTIHANDICAPPED BLIND CHILDREN IN CALIFORNIA

Purpose: To ascertain the number, nature, extent, and location of multihandicapped blind children in California; to determine their educational needs, provide a complete program of educational and ancillary services for them, and to determine staff requirements for such programs.
Subjects: Children under 21 defined as visually handicapped with other marked handicaps and who for reason of their combinations of handicaps cannot or should not be admitted to, and cannot profit satisfactorily from, classes provided for blind, mentally retarded, or other handicapped children.
Methods: Questionnaires; consultations with educators and administrators in the field of special education, with parents, parent representatives, and medical authorities.
Duration: November 1967-May 1968.
Investigator(s): Berthold Lowenfeld, Ph.D., Consultant in Education and Psychology (Blindness), 2928 Avalon Ave., Berkeley, Calif. 94705.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Report to be submitted in May 1968 to the Division of Special Schools and Services, State Department of Education, Sacramento.

SOCIAL SERVICES

22-RD-1 A STUDY OF THE RELATIONSHIP BETWEEN PARENTS' MARITAL ADJUSTMENT AND THEIR ACCEPTANCE OF ADOPTED CHILDREN OF ETHNICALLY DIFFERENT BACKGROUND

Purpose: To investigate relationships between parental acceptance of adopted children, adoptive parents' marital adjustment, religiosity, and certain family characteristics in cases where the adopted child is of an ethnically different background.
Subjects: 129 parents of 168 adopted children born in the United States or the Far East of racially mixed parentage.
Methods: Porter Parental Acceptance Scale, a modified short marital adjustment scale originally developed by H.J. Locke and others, Warner's Index of Status Characteristics, correlation analysis, the t test, analysis of variance, chi-square test, and critical ratio test are applied to data derived from an anonymous mail questionnaire.
Findings: A moderate positive relationship exists between adoptive fathers' marital adjustment and their acceptance of adopted children, but there is no relationship between the two variables for adoptive mothers. Parents are satisfied with their adopted children who are likely to inherit their fathers' social status. Majority of the sample indicate an approval of interracial or intercountry adoption.
Duration: March 1962-June 1967.
Investigator(s): Chae S. Sone, Ph.D., Reference Librarian, Hicksville Public Library, Hicksville, N. Y.
Cooperating group(s): Board of Trustees, Welcome House (an adoption agency).
Publications: Plan to submit to Journal of Marriage and the Family and Journal of Home Economics.

22-RE-1 A REVIEW OF THE COMPARATIVE OUTCOMES OF SERVICES RENDERED BY FOSTER PARENTS ENGAGED IN LONG-TERM FOSTER CARE: MATCHED AND UNMATCHED PLACEMENTS, 1960-1965

Purpose: To explore in detail some aspects of the home study process and possible factors affecting home study outcomes; to ascertain the possible relationship between foster parent preferences for specific characteristics in a child, agency matching or not matching these preferences, and outcomes two years after initial placements.
Subjects: Random sample of foster home studies of 150 applicant families, January 1960 to December 1965; random sample of placements involving 47 foster families and 61 foster children, January 1960 to December 1963.
Methods: Case records provided primary source of data. Foster homes studied were sampled at random and results noted on schedules designed for this purpose. Some casework staff were interviewed.
Findings: Suitable foster parents are difficult to recruit, with high loss occurring between approval for and entrance into home study. Greater durability of placement occurs when foster parent preferences are elicited and discussed prior to placement and accommodated where feasible. Caseworker judgment appears to be a major factor in home study outcomes. There was a positive relationship between homes that failed (served less than two years) and lack of adequate information

about foster parent preferences. Of the homes that failed, most had been given a favorable evaluation by home study workers. These two findings suggest the need for greater skill and/or training on the part of home study workers.
Duration: February 1966-June 1967.
Investigator(s): Herbert C. Boykin, M.S., Director, Foster Family Boarding Home Division, St. Vincent's Hall, Inc., 130 Clinton St., Brooklyn, N. Y. 11201.
Cooperating group(s): Sheltering Arms Children's Service, 122 E. 29th St., New York, N. Y. 10016.
Publications: Mimeographed copies of report available from Sheltering Arms Children's Service.

22-RE-2 FOSTER CARE AGENCY CASELOAD STUDY

Purpose: To determine the services provided by five child placement agencies to children in care and their families, and to assess the adequacy of the services in relation to the needs of the foster children.
Subjects: The whole caseload of three agencies and a 50 percent random sample of two others, all as of July 1, 1967.
Methods: Data on family history, family situation at the present time, services provided during a two-year period, and services needed are collected by each caseworker on schedules developed by the Health and Welfare Council. Data will be processed by IBM and analyzed.
Duration: July 1967-April 1968.
Investigator(s): Marie E. Costello, D.S.W., Senior Research Associate, Health and Welfare Council, Inc., 1617 John F. Kennedy Blvd., Philadelphia, Pa. 19103.
Cooperating group(s): Association for Jewish Children; Catholic Social Services; Inter-Church Child Care Society; Lutheran Children's Bureau; Children's Center of the Episcopal Church; Loeb Fund, Philadelphia Foundation, Philadelphia.
Publications: Publication planned.

22-RE-3 PSYCHOLOGICAL CHARACTERISTICS OF FOSTER CHILDREN AND FOSTER PARENTS

Purpose: To study the behavior of foster children and foster parents in light of measures, experimental methods, and findings of basic psychological science; to form a bridge between this science and child welfare practices.
Subjects: Foster children and foster parents on rolls of Child Welfare Board of Portage County, Ohio; non-foster controls matched for age, sex, race, and grade level.
Methods: Children are tested on a marble-dropping task to determine relationship between social deprivation due to foster placement and responsiveness to adult social reinforcement. Expressions of n Affiliation on TAT productions by the children are related to their status as foster children and their responsiveness to the social reinforcement. A new phase will focus on placement in a new foster home as a crisis. The PARI and a child behavior rating scale will be administered immediately after placement and some time later to determine relationship between certain parent attitudes and time and degree of adjustment.
Findings: Foster children appear to be more responsive to adult social reinforcements than their non-foster peers and show a higher degree of n Affiliation. The two dependent measures appear to be positively related.

Duration: March 1967-1969.
Investigator(s): Jeanette M. Reuter, Ph.D., Assistant Professor of Psychology, and Caroline T. Toepfer, Ph.D. Candidate, Kent State University, Kent, Ohio 44240.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned.

22-RE-4 LONG-TERM FOSTER CARE: ITS POTENTIAL FOR CHILDREN

Purpose: To analyze the results of the Five-Year Project on Foster Care carried out by the Spence-Chapin Adoption Service of New York City, August 1962-August 1967.
Subjects: All 1,211 children and 474 foster families accepted into the Project; entire casework staff.
Methods: Schedules were used for foster children, foster parents, and staff. A 10 percent sample of parents and students was interviewed as well as key persons in the community and the Agency's supervisory staff and board members. Schedules were filled out by workers and supervisors. Judgments regarding qualitative terms used in the schedules were standardized by means of discussion of the entire staff engaged in the Project until a consensus was reached as to meaning and application.
Findings: Ninety-seven percent of the children made good and average progress in their foster homes in spite of the fact that many came to these homes with emotional, medical, and environmental problems. Transfers from one foster home to another were required for only 16 percent of the children.
Duration: May 1966-December 1967.
Investigator(s): Bernice Madison, Ph.D., Professor of Social Work, San Francisco State College; and Michael Schapiro, M.A., Children's Home Society of California, San Francisco, Calif. 94132.
Publications: Three articles planned for Child Welfare, 1968; Spence-Chapin is considering publishing a book after additional work is done to place the Project in a national framework.

22-RF-1 DAY CARE NEEDS IN CHICAGO

Purpose: To survey resources and estimate needs for day care services for children in Chicago on a neighborhood-by-neighborhood basis.
Subjects: 75 community areas of Chicago.
Methods: A survey was conducted to provide a descriptive inventory of existing day care resources with spot maps. Relative day care needs were estimated through indicators derived from Census figures and related measures, and national survey findings relative to day care arrangements were applied to local populations.
Duration: July 1966-July 1967.
Investigator(s): Naomi Kroeger, M.A., Research Associate, Welfare Council of Metropolitan Chicago, 123 W. Madison St., Chicago, Ill. 60091. (Reported by Sidney E. Zimbalist, Research Director, Welfare Council of Metropolitan Chicago.)
Publications: Report available from Welfare Council of Metropolitan Chicago.

22-RJ-1 A STUDY OF THE EFFECTS OF FAMILY LIFE EDUCATION SERVICES: VARIATIONS ACCORDING TO SOCIO-ECONOMIC STATUS AND INTENSITY OF INVOLVEMENT

Purpose: To evaluate effects of observation nursery schools and other mental health services on mental health, cognitive abilities, and achievement of children, and mental health and attitudes of mothers.
Subjects: 100 low income families and 100 middle class families; control groups.
Methods: Service is provided for one year. Children are studied prior to and immediately after taking part in the program, and at yearly intervals for five years. Evaluation is based upon psychological tests of cognitive, psychomotor, and verbal abilities, mothers' reports of children's symptoms, and children's performance and attendance at school. Mothers who engage in weekly discussion groups during the one-year period will be evaluated by the Hereford Attitude Scale and the Langner Scale, which measures functional symptoms.
Duration: October 1967-June 1972.
Investigator(s): R. H. Prince, M.D., Research Director, Mental Hygiene Institute, and Assistant Professor of Psychiatry, McGill University, Montreal, Quebec, Canada.
Cooperating group(s): National Council of Jewish Women.
Publications: Publication is planned; reports will be available from Dr. Prince.

22-RL-1 TIME-LIMITED PROGRAMS OF CRISIS INTERVENTION

Purpose: To explore and describe family service agencies and child psychiatric clinics that offer time-limited, crisis-oriented services.
Subjects: Approximately 100 family agencies and clinics, including approximately 1,600 cases.
Methods: Two study instruments are used: a general program questionnaire and case schedules. Emphasis is on the analysis of the planned use of the time dimension as well as a study of styles of crisis intervention.
Duration: 1965-1968.
Investigator(s): Howard J. Parad, D.S.W., Dean, Smith College School for Social Work, Northampton, Mass. 01060.
Cooperating group(s): American Association of Psychiatric Clinics for Children; Family Service Association of America.
Publications: Plan to publish monograph.

HEALTH SERVICES

22-SA-1 STUDY OF HOSPITALIZATION OF YOUNG HAIFA CHILDREN

Purpose: To assess factors predisposing the need for hospitalization; to identify prospective candidates for hospitalization as a step toward reducing the need for it.
Subjects: 5,000 newborns in Haifa, Israel.
Methods: Hospitalization records are studied to identify high-risk children and their families. Preventive services concentrating on this group may materially reduce the amount of hospital care required.
Duration: July 1966-July 1969.
Investigator(s): Dr. Simon T. Winter, Director of Pediatric Department, and Dr. William Mainzer, Honorary Research Associate in Obstetrics, Rothschild Hospital, Haifa, Israel.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

22-SA-2 PKU SCREENING IN THE STATE OF WASHINGTON

Purpose: To evaluate changes in PKU screening practices on newborns in the State of Washington over a three-year period.
Subjects: Infants born in hospitals with obstetric facilities.
Methods: Questionnaires to determine: type of test performed and laboratory used for analysis; when testing program was started; hospital policies regarding timing of test and reporting of results to physician and parents; number of newborns discharged and number of newborns tested during 1965, first six months of 1966, and first six months of 1967.
Findings: During 1965 46 percent of newborns in the State of Washington had a test for serum phenylalanine before discharge from the newborn nursery; during the first six months of 1966 the number increased to 60 percent so tested. Wide local variations in screening practice were found. Changes following community education and passage of a "permissive" PKU law in early 1967 will be evaluated by comparison with earlier survey results.
Duration: 1966-Fall 1967.
Investigator(s): Vanja A. Holm, M.D., Instructor of Pediatrics, Division of Child Health, University of Washington, Seattle, Wash. 98105. (Reported by Margaret A. Ohlson, Ph.D., Research Coordinator, Division of Child Health.)
Cooperating group(s): Washington Association for Retarded Children; Washington State Medical Association; Washington State Department of Health.
Publications: 1965-1966 results available as a report from the PKU Subcommittee of the Maternal and Child Health Committee, Washington State Medical Association, 444 N.E. Ravenna Blvd., Seattle, Wash. 98105. Results of the final survey will be submitted to a professional journal.

22-SB-1 SCHOOL HEALTH INTENSIVE REFERRAL PROGRAM

Purpose: To demonstrate the value of intensive follow-up by school nurses for correction of defects in school children.
Subjects: Public school children with known ailments or defects, and their parents.
Methods: Intensive follow-up by nurses in contacting parents through home visits, telephone conferences, and in schools to make sure they understand the nature of their children's conditions, are encouraged to seek treatment for them, and are made aware of the medical resources available to them in the community.
Findings: There has been an increase in the number of corrections completed through this program.
Duration: October 1966-June 1968.
Investigator(s): Marie E. C. Frey, M.D., M.P.H., Director, Division of Medical Services, School District of Philadelphia, 21st and Parkway, Philadelphia, Pa. 19103.
Cooperating group(s): Division of Community Health Services, Public Health Service, U. S. Department of Health, Education, and Welfare.

22-SD-1 MATERNAL CONTACT AND PREMATURE INFANT DEVELOPMENT

Purpose: To develop and evaluate a program of in-hospital involvement of mothers in the care of low birthweight infants; to evaluate effect of this program on maternal attitudes and behavior in caring for their infants during the first year of life; to evaluate effectiveness of a program of increased maternal care and stimulation on limiting disability associated with prematurity; and to provide comparative data on developmental difficulties among prematures of differing birthweights.
Subjects: 130 premature infants weighing between 1,400 and 2,000 grams; 65 premature infants weighing between 2,001 and 2,500 grams; 145 normal infants weighing 2,501 grams or more.
Methods: Longitudinal study.
Duration: January 1965-continuing.
Investigator(s): Richard M. Silberstein, M.D., Director, and Wallace Mandell, Ph.D., Research Director, Staten Island Mental Health Society, Inc., 657 Castleton Ave., Staten Island, N. Y. 10301.
Cooperating group(s): U. S. Department of Health, Education, and Welfare.

22-SD-2 A STUDY OF THE EFFECTIVENESS OF COMPREHENSIVE PRENATAL CARE FOR PREGNANT ADOLESCENTS

Purpose: To determine whether comprehensive prenatal care is superior to routine outpatient department prenatal care for pregnant adolescents; to develop a profile of the pregnant adolescent population in the Sinai program in terms of life experiences, attitudes, family life patterns and aspirations, and attitudes towards medical and preventive care.
Subjects: All teenagers below age 18, registering for prenatal care at Sinai Hospital.
Methods: All subjects are interviewed at entry to study; mothers of subjects are interviewed separately on many of the variables covered in daughters' interviews. Subjects are allocated by blind method to either comprehensive prenatal care in Family Obstetrical Clinic, or to control program of traditional prenatal care in the obstetrical clinic.

All girls are re-interviewed six months to a year following delivery, and a follow-up evaluation is made of several variables to determine effectiveness of care received.
Duration: 1965-1969.
Investigator(s): Milton Markowitz, M.D., Director; Leon Gordis, M.D., M.P.H., Associate Director; and Frank Furstenberg, Jr., Ph.D., Social Scientist, Family Clinic, Sinai Hospital, Baltimore, Md. 21215.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Preliminary report in progress, 1967; series of full reports planned.

22-SD-3 COMPREHENSIVE CARE OF YOUNG ADOLESCENT PARENTS AND THEIR CHILDREN

Purpose: To learn better ways of providing care to adolescent parents and their children by learning more about their needs and attitudes.
Subjects: 16- and 17-year-old mothers who become pregnant and who are cared for at the Milwaukee Children's Hospital.
Methods: Girl is examined, and if pregnancy is confirmed, her parents, and often the father of the expected child, are seen by a doctor, social worker, and nurse for formulation of a plan of care. Problems of education for the parents and care of the child are worked out while obstetrical care is being given.
Findings: Prenatal interviews with parents and grandparents can prevent many of the lapses in the infant's care and disturbed psychological state of the family that would interfere with the child's development.
Duration: February 1967-continuing.
Investigator(s): Frederic M. Blodgett, M.D., Professor of Pediatrics, and Director, and N. Otto, R.N., Director of Nursing, Maternal and Child Health Clinics, Marquette University School of Medicine, Milwaukee, Wis. 53233.
Publications: Publication planned for 1968.

22-SF-1 CHILDREN AND YOUTH PROGRAM

Purpose: To assess effects of a comprehensive health care program on children from indigent families.
Subjects: Underprivileged children from birth to adolescence.
Methods: Children are interviewed and screened. They will be given medical, dental, and social care, including preventive treatment and therapeutic management of acute and chronic illness, over a five-year period. Findings will be assessed.
Duration: July 1966-1971.
Investigator(s): Giulio J. Barbero, M.D., Professor of Pediatrics, and Arthur Lipschutz, M.D., Associate Professor of Pediatrics, Hahnemann Medical College and Hospital, Philadelphia, Pa. 19102.
Cooperating group(s): Board of Education, Departments of Welfare and Health, Philadelphia.

22-SG-1 DISTURBED CHILD-LOW INCOME FAMILY STUDY CLINIC

Purpose: To demonstrate the feasibility of a dispersed community mental health clinic; to determine the type of caseload which could be expected in response to the availability of such an institution.
Subjects: A selected group of emotionally disturbed children from families in nearby low income community; control group of non-disturbed children from same community.
Methods: Parents and individual children are interviewed; disturbed children undergo physical examinations and psychological and neurological tests. Observation is made in different situations, i.e., group relations, play therapy, classroom behavior, family relations, community relations, etc. with analysis of results from overall studies.
Duration: May 1966-April 1968.
Investigator(s): H. A. Meyersburg, M.D., Research Associate, Washington School of Psychiatry Study Clinic, 10400 Connecticut Ave., Kensington, Md. 20795.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned.

ORGANIZATIONS

ALABAMA

University of Alabama
  Department of Psychology 22-HE-1

ARIZONA

University of Arizona
  School of Home Economics 22-MB-3

CALIFORNIA

California School for the Deaf 22-JH-3
Chico State College
  Department of Psychology 22-ED-1
Children's Home Society of California 22-RE-4
Hacker Clinic 22-KD-3
Humboldt State College
  Department of Psychology 22-MB-4
Institute for the Study of Crime and Delinquency 22-KS-4
Kaiser Foundation Hospital
  Department of Obstetrics and Gynecology 22-AA-5
  Department of Pediatrics 22-AA-5
Lemon Grove School District 22-QE-1
Monterey County Probation Department 22-KR-1
Pomona Unified School District
  Guidance Department 22-OB-2
Presbyterian Medical Center
  Youth Clinic 22-AA-10
San Diego County Probation Department 22-KS-5
San Francisco State College
  School of Behavioral and Social Sciences 22-RE-4
Sequoia Union High School District
  Department of Guidance and Research 22-OA-1
Stanford University
  Department of Psychology 22-DG-2, 22-EE-1
  Laboratory of Human Development 22-DG-2
  School of Medicine 22-AA-10
State Department of Corrections
  Parole Outpatient Clinic 22-KD-3
State Department of Education
  Division of Special Schools and Services 22-QH-3

CALIFORNIA (cont'd.)

State Department of Mental Hygiene
  Fairview State Hospital 22-HH-3
  Pacific State Hospital 22-HH-2
University of California
  Berkeley
    Institute of Human Development 22-AA-6, 22-NC-2
    School of Education 22-DC-4
    School of Public Health 22-AA-5
  Los Angeles 22-HH-3
    Department of Education 22-QE-8
    Department of Sociology 22-LA-2
    Medical Center 22-JC-1, 22-MB-1
      Neuropsychiatric Institute 22-LH-1
  Riverside
    Department of Sociology 22-LF-2
  San Francisco
    Medical School
      Department of Psychiatry 22-JE-1
University of Southern California
  Center for the Study of Speech and Hearing 22-CH-1
  Medical School 22-OB-2

COLORADO

Children's Asthma Research Institute and Hospital 22-JD-1
University of Colorado
  Medical Center
    Child Research Council 22-AA-1

CONNECTICUT

Mid-Fairfield Child Guidance Center, Inc. 22-JB-4
Yale University
  Department of Psychology 22-DA-2
  School of Medicine
    Child Study Center 22-JH-2
    Department of Psychiatry 22-DB-3, 22-JH-2

DISTRICT OF COLUMBIA

Catholic University
  Department of Psychology 22-HE-2, 22-HE-3

DISTRICT OF COLUMBIA (cont'd.)

- George Washington University
  - Department of Psychology 22-DB-2
  - Social Research Group 22-QG-1
- Howard University
  - College of Medicine
    - Center for Mental Health 22-EA-4
  - Department of Sociology 22-NF-1

FLORIDA

- Florida State University
  - Department of Home and Family Life 22-EA-2
  - Institute of Human Development 22-EA-2
- Sunland Training Center 22-OF-8
- University of Florida
  - College of Education 22-JA-1, 22-OF-8
  - Department of Clinical Psychology 22-DC-1
  - Learning to Learn School 22-DC-1
  - Reading Laboratory and Clinic 22-PB-1
- University of Miami
  - Department of Psychology 22-HC-2
- University of South Florida
  - College of Education 22-OF-5

GEORGIA

- University of Georgia
  - School of Home Economics 22-DF-2
  - School of Social Work
    - Child Research Field Station 22-LF-5, 22-LF-6, 22-MB-2, 22-MB-5, 22-MB-7

ILLINOIS

- Chicago Institute for Psychoanalysis 22-KS-2
- Chicago Maternity Center 22-GE-2
- Institute for Juvenile Research 22-EB-3, 22-EB-4, 22-JB-3, 22-JB-6, 22-NE-3
- Loyola University
  - Department of Psychology 22-DF-1
- Neuropsychiatric Institute 22-KS-2
- North Central College 22-MB-4
- Northwestern University
  - Department of Political Science 22-NC-1
  - Institute of Language Disorders 22-OF-2
  - School of Medicine 22-GE-2, 22-OF-2

ILLINOIS (cont'd.)

- Southern Illinois University
  - Center for the Study of Crime, Delinquency, and Corrections 22-QE-2
- State Department of Mental Health
  - John Madden Zone Center 22-JA-2
- University of Chicago
  - Department of Education 22-OF-7
- University of Illinois
  - Children's Research Center 22-KS-3
  - College of Medicine 22-EB-4, 22-LG-3
  - Laboratory of Personality Group Analysis 22-LA-1
- Welfare Council of Metropolitan Chicago 22-RF-1

INDIANA

- Indiana University
  - University Schools
    - Institute for Child Study 22-DG-1
- Purdue University
  - Department of Education 22-OB-1
  - Student Health Center 22-OB-1

IOWA

- University of Iowa
  - Department of Home Economics 22-LC-2

KENTUCKY

- University of Louisville
  - School of Medicine
    - Child Psychiatry Research Center 22-JB-2, 22-JH-4

MARYLAND

- Johns Hopkins University
  - Center for the Study of the Social Organization of Schools 22-DB-4
  - Department of Social Relations 22-OF-1
  - School of Hygiene and Public Health 22-KA-1
- Sinai Hospital
  - Family Clinic 22-SD-2
- Washington School of Psychiatry
  - Study Clinic 22-SG-1

MASSACHUSETTS

- Boston College
  - School of Education 22-DC-2
- Children's Study Home 22-JG-4

MASSACHUSETTS (cont'd.)

- Douglas A. Thom Clinic for Children 22-QD-1
- Harvard University
  - Graduate School of Education 22-DA-3
  - School of Public Health 22-AA-2, 22-AA-4, 22-LF-7
- Mount Holyoke College
  - Department of Psychology and Education 22-CG-1
- Smith College
  - School for Social Work 22-RL-1

MICHIGAN

- Dearborn Public Schools
  - Psychological Services 22-QC-1, 22-QH-1
- Kalamazoo County Juvenile Court 22-KS-6
- Michigan Epilepsy Center 22-GC-6
- University of Michigan
  - Institute for Social Research 22-NB-2, 22-OK-1

MINNESOTA

- Bemidji State College 22-KJ-3

MISSOURI

- Jewish Hospital of St. Louis 22-LF-3
- Kansas City School District
  - Department of Research and Development 22-QE-6
- Washington University
  - Behavior Research Laboratory 22-BA-5

NEBRASKA

- University of Nebraska
  - Nebraska Curriculum Development Center 22-DB-1

NEW HAMPSHIRE

- Dartmouth College
  - Medical School
    - Division of Child Psychiatry 22-EC-1

NEW JERSEY

- Child Guidance Clinic of the Oranges, Maplewood, and Millburn 22-JG-3
- Educational Testing Service 22-OF-5
- Essex County Youth House 22-KD-1

NEW JERSEY (cont'd.)

- Rutgers, The State University
  - Douglass College
    - Department of Economics and Sociology 22-OF-4
- Seton Hall University
  - Department of Psychology 22-KD-1
- State Department of Institutions and Agencies
  - North Jersey Training School 22-HH-1

NEW MEXICO

- New Mexico Highlands University
  - Department of Behavioral Sciences 22-NG-2

NEW YORK

- Associated YM-YWHA's 22-QE-5
- Child Development Center 22-JB-1, 22-KD-2
- City University of New York
  - Hunter College
    - Educational Clinic 22-NE-1
  - Queens College
    - Department of Psychology 22-DH-1
- Columbia University
  - Teacher's College 22-FD-2, 22-QE-10
- Cornell University
  - Department of Child Development and Family Relationships 22-MB-6, 22-OF-3
  - Department of Rural Sociology 22-NB-1
- Eastman Dental Center 22-CF-1
- Fordham University
  - Department of Psychology 22-HC-1
- League School for Seriously Disturbed Children 22-JG-1
- Montefiore Hospital and Medical Center
  - Adolescent Unit 22-BA-7
  - Division of Pediatrics 22-BA-7
- New York University
  - Medical Center 22-LD-1
  - School of Education 22-CC-1
- St. Vincent's Hall, Inc.
  - Foster Family Boarding Home Division 22-RE-1
- State Department of Correction
  - Division of Research 22-KD-4
- State Department of Mental Hygiene
  - Creedmoor State Hospital 22-JH-6
- State University of New York
  - Albany
    - Graduate School of Social Welfare 22-LC-3

NEW YORK

- State University of New York (cont'd.)
  - Brooklyn
    - Downstate Medical Center
      - Department of Psychiatry 22-BA-4
  - Oneonta
    - Department of Education 22-EA-1
- Union College and University
  - Character Research Project 22-AA-14
- Welcome House 22-RD-1
- Yeshiva University
  - Albert Einstein College of Medicine 22-AA-8, 22-BA-7, 22-CF-2

NORTH CAROLINA

- Learning Institute of North Carolina 22-QB-1
- University of North Carolina
  - Department of Anthropology 22-NE-2
  - Medical School
    - Department of Psychiatry 22-EG-1

OHIO

- Antioch College
  - Fels Research Institute for the Study of Human Development 22-AA-3
- Family Service of the Cincinnati Area 22-LF-4
- Kent State University
  - Department of Psychology 22-RE-3
- Ohio State University
  - Department of Sociology 22-KR-2
- Western Reserve University
  - Division of General Studies 22-DE-2
  - Frances Payne Bolton School of Nursing 22-LG-1
  - School of Medicine
    - Department of Anatomy 22-AA-12

OKLAHOMA

- Oklahoma City Public Schools 22-GC-2
- State Department of Education 22-KK-1
- University of Oklahoma
  - Medical Center 22-OB-1

OREGON

- University of Oregon
  - Dental School
    - Child Study Clinic 22-AA-11

OREGON

- University of Oregon (cont'd.)
  - Medical School
    - Department of Pediatrics 22-IA-1
    - Department of Psychiatry 22-FC-1
  - School of Health, Physical Education, and Recreation 22-AA-7

PENNSYLVANIA

- Carnegie-Mellon University 22-DG-3
- Chatham College
  - Department of Psychology 22-EB-2
- Devereux Foundation
  - Institute for Research and Training 22-GC-4
- Hahnemann Medical College and Hospital 22-SF-1
- Health and Welfare Council, Inc. 22-RE-2
- Pennsylvania State University
  - Speech and Hearing Clinic 22-GC-5
- Personnel Research Center 22-GC-7
- Philadelphia Center for Cranio-facial Biology 22-AA-9
- Philadelphia Center for Research in Child Growth 22-AA-9
- Philadelphia Psychiatric Center 22-KS-1
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- School District of Philadelphia
  - Division of Medical Services 22-SB-1
- University of Pennsylvania
  - Department of Physical Anthropology 22-AA-9
  - Division of Graduate Medicine
    - Department of Orthodontics 22-AA-9
- Youth Development Center at South Philadelphia 22-KS-1

TENNESSEE

- Memphis City Schools 22-DD-1
- St. Jude's Children's Hospital 22-LG-3
- University of Tennessee 22-OF-9
  - Department of Psychology 22-PB-2
- Vanderbilt University
  - Bill Wilkerson Hearing and Speech Center 22-GE-1

TEXAS

- North Texas State University
  - School of Education 22-QE-1

TEXAS (cont'd.)

Rice University
   Department of Anthropology and
      Sociology 22-NG-1
Texas Southern University
   Department of Elementary Education
      22-OF-6
Texas Technological College
   Department of Psychology 22-LA-1
   Department of Sociology and
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University of Houston
   College of Education 22-QE-3
University of Texas
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UTAH

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VIRGINIA

University of Virginia
   School of Medicine 22-LG-2

WASHINGTON

University of Washington
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      22-SA-2
Washington State University
   Department of Child and Family
      Studies 22-FD-1
   Department of Sociology 22-LC-1

WISCONSIN

Marquette University
   Department of Psychology 22-DA-1
   School of Medicine 22-SD-3
State Department of Welfare
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      22-KC-2
University of Wisconsin
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NATIONAL

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U. S. Government:
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AUSTRALIA

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CANADA

Carleton University
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Children's Hospital
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McGill University
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University of Montreal
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University of Waterloo
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ENGLAND

Hampstead Child Therapy Clinic 22-JA-3
Maudsley Hospital
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FRANCE

Centre de Formation et de Recherche de
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INDIA

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ISRAEL

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Rothschild Hospital 22-SA-1

NEW ZEALAND

Victoria University
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SCOTLAND

University of Aberdeen
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   Medical Sociology Research Unit
      22-BA-1

TANZANIA

University College 22-KC-1

THAILAND

Thammasat University 22-MB-4

WEST INDIES

University of the West Indies
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INVESTIGATORS

Allen, Robert M. 22-HC-2
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Bachman, Jerald G. 22-NB-2
Barbero, Giulio J. 22-SF-1
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Carpenter, Elizabeth T. 22-DB-1
Cartwright, Walter J. 22-QE-4
Cattell, Raymond B. 22-LA-1
Chesler, Mark 22-OK-1
Clark, Donald H. 22-NE-1
Clark, Rita W. 22-BA-4
Clarke, H. Harrison 22-AA-7
Cobrinik, Leonard 22-JH-6
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Cohen, Herbert J. 22-CF-2
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Coleman, James S. 22-OF-1
Concannon, Sister Josephine 22-DC-2
Cook, Harold 22-QE-8
Copple, Peggy J. 22-IA-1
Cortazzo, Arnold D. 22-OF-8
Costello, Marie E. 22-RE-2
Coyle, Sister John Vianney 22-DC-2
Creswell, John L. 22-QE-3
Crotty, William J. 22-NC-1
Cunningham, Myron A. 22-JA-1, 22-OF-8

Daniel, Artie A. 22-QE-1
Davol, Stephen H. 22-CG-1
Deal, Therry N. 22-DF-2
Décarie, Thérèse Gouin 22-EA-3
DeHaven, George 22-GC-4
Delhees, Karl H. 22-LA-1
De Saix, Christine 22-LF-6, 22-MB-2
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CENTER FOR RESEARCH AND ADVANCED TRAINING IN DEAFNESS REHABILITATION

The Center for Research and Advanced Training in Deafness Rehabilitation was initiated at New York University under the sponsorship of the Vocational Rehabilitation Administration. The Center's program is organized around three main branches: Training, Research, and Consultation. In research, the major concern is with the field of human communication, programmatically designed for integrated studies of the multiple aspects of communication.

CHILD CARE INFORMATION CENTER

The Presbyterian Institute for Human Development, Inc. has established the Child Care Information Center. The Center will be concerned with the group care of children. Further information is available from Mr. George Perkins, Director of the Institute, Box 23309, Anchorage, Ky. 40223.

NATIONAL LABORATORY IN EARLY CHILDHOOD EDUCATION

The Office of Education, U. S. Department of Health, Education, and Welfare, has established a National Laboratory in Early Childhood Education, under which centers have been set up at seven colleges and universities. These centers will represent a diversity of philosophies and approaches to early childhood education. Research and development activities of the Laboratory will be coordinated by the Center at the University of Illinois (which is also one of the eighteen ERIC Clearinghouses referred to on the following page). Information on the National Laboratory may be obtained from Dr. J. McVicker Hunt, Director, National Coordination Center, 805 West Pennsylvania Ave., Urbana, Ill. 61801.

OTHER ABSTRACTING JOURNALS AND SERVICES

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind. 47907.
Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn. 06102.
Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. 48103. (Gives synopses of U. S. doctoral dissertations with an annual index.)
dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington, D. C. 20002.
Epilepsy Abstracts, National Institute of Neurological Diseases and Blindness, Public Health Service, Building 31, Room 8A-03, Bethesda, Md. 20014.
Excerpta Criminologica, New York Academy of Medicine Bldg., 2 E. 103rd St., New York, N. Y. 10029.
Inventory of Social and Economic Research in Health, Health Information Foundation, 5555 S. Ellis Ave., Chicago, Ill. 60637.
Language and Language Behavior Abstracts (quarterly), Center for Research on Language and Language Behavior, University of Michigan, Ann Arbor, Mich. Annual subscription $22.50. Order from Subscription Manager, LLBA, Meredith Publishing Co., 440 Park Ave. S., New York, N. Y. 10016.
Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York, N. Y. 10017.
Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y. 10019.
Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.
Poverty and Human Resources Abstracts (bimonthly), Institute of Labor and Industrial Relations, University of Michigan-Wayne State University, P. O. Box 1567, Ann Arbor, Mich. 48106. Annual subscription $40.00.
Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington, D. C. 20036.
Rehabilitation Literature, National Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago, Ill. 60612.
Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 215 Park Ave. S., New York, N. Y. 10003.
Sociological Abstracts, Leo P. Chall, 225 W. 86th St., New York, N. Y. 10024.

Through the Educational Resources Information Center (formerly the Educational Research Information Center), better known as ERIC, current research and research-related information will be made available to teachers, administrators, researchers, commercial organizations, and others. ERIC also includes eighteen clearinghouses, or documentation centers, located at universities and other institutions throughout the country. Each clearinghouse will concentrate on a different subject-matter area. More complete information may be obtained by writing to the Director of ERIC, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20202.

The Excerpta Medica Foundation, New York Academy of Medicine Building, 2 E. 103rd St., New York, N. Y. 10029, has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, the Foundation can provide to subscribers, at cost, photocopies and translations of complete articles.

The Human Relations Area Files have classified cultural data on primitive and nonprimitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Minnesota Family Study Center can supply to interested scholars bibliographic information from the Inventory of Published Research in Marriage and Family Behavior. Requests for information should be addressed to the Director, Inventory of Published Research in Marriage and Family Behavior, Social Science Tower 1026, University of Minnesota, Minneapolis, Minn. 55455.

The Library of the National Society for Crippled Children and Adults has initiated a photoduplication service for persons engaged in rehabilitation research. It is available without charge to personnel in educational or research institutions and health or welfare agencies, public or private. This service hopes to provide the necessary professional literature not available in local libraries. Further information may be obtained by writing to the Librarian of the Society, 2023 W. Ogden Ave., Chicago, Ill. 60612.

The Science Information Exchange, Smithsonian Institution, 209 Madison National Bank Bldg., 1730 M St., N. W., Washington, D. C. 20036, provides to qualified investigators, on request, selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

The Library of the National Bureau for Child Welfare (Voor Kinderbescherming), Stadhouderslaan 150, The Hague, publishes abstracts of articles in the field of child welfare each month. These are in Dutch, but those familiar with the Universal Decimal System would be able to understand something about the article. The subscription rate for documentation on cards is 30 guilders (approximately $8.40).

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D C. 20201

If you are currently engaged in research on children or their families, we would appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to make such information available to research investigators and others concerned with research in child life.

The instructions on the third page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

____

Thank you for your cooperation.

INFORMATION SUPPLIED BY

Name ______________________________

Position ______________________________

Organization and address ______________________

____

_______________ ZIP CODE ____________

Form CB-200-C

Budget Bureau No. 122-R0021

SUMMARY OF RESEARCH PROJECT

TITLE:

PURPOSE:

SUBJECTS *(Sample)*:

METHODS:

FINDINGS TO DATE, IF ANY:

DATE PROJECT INITIATED:	ESTIMATED TERMINAL DATE:

PRINCIPAL INVESTIGATOR(S) ONLY:	DEGREE:	POSITION AND ORGANIZATION:

COOPERATING GROUPS *(In the research or in the funding of the research)*:

PUBLICATION REFERENCES AND/OR PLANS *(If no publication is planned, please indicate under what conditions data and results will be available)*:

IF THIS REPRESENTS WORK TOWARD AN ACADEMIC DEGREE, PLEASE STATE DEGREE *(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry)*:

BEST COPY AVAILABLE

INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic Act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research relating to children in order to make such information available for the use of investigators, administrators, program planners, and practitioners.

Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. A free copy of each issue is also sent to directors of research centers and to libraries. In addition, the Clearinghouse maintains a mailing list of interested persons who receive announcements of new issues as they are published. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The Children's Bureau Clearinghouse routinely exchanges information with the Science Information Exchange of the Smithsonian Institution. This organization is very helpful in providing abstracts of research supported by federal funds and by many foundations. The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL AND REHABILITATION SERVICE

Children's Bureau Washington, D.C. 20201

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name ____________________

Address ____________________

____________________ Zip Code ________

Name ____________________

Address ____________________

____________________ Zip Code ________

Name ____________________

Address ____________________

____________________ Zip Code ________

Name ____________________

Address ____________________

____________________ Zip Code ________

Signed ____________________

____

________ Zip Code ________

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CLEARINGHOUSE PUBLICATIONS

Bibliography on the Battered Child, May 1966. Copies free from the Clearinghouse, Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.

Research Relating to Juvenile Delinquents, 1962 (reprinted 1966). A listing of studies reported to the Clearinghouse between 1948-1961, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office, Washington, D. C. 20402, for 35 cents. Do not send money to the Clearinghouse.

Research Relating to Mentally Retarded Children, 1966. A listing of studies reported to the Clearinghouse between 1948-1965, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office for 65 cents. Do not send money to the Clearinghouse.

Research Relating to Children.* An inventory of abstracts of ongoing or recently completed research studies published once or twice a year. Single copies of the following issue are available without charge from the Clearinghouse. (Dates indicate period during which studies were reported to us.)

Bulletin II, Supplement 4 (February-November 1955)

The following issues are available for purchase directly from the Government Printing Office, at the prices indicated. Do not send money to the Clearinghouse.

Bulletin 17 (February 1963-February 1964) - 75 cents
Bulletin 18 (March-December 1964) - $1.25
Bulletin 19 (January-September 1965) - $1.50
Bulletin 20 (October 1965-May 1966) - $1.25
Bulletin 21 (June 1966-April 1967) - $1.25

All issues not listed above are OUT OF PRINT but are available in many libraries.

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*An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. A free copy of each issue is available to libraries and research centers. The Clearinghouse also maintains a mailing list of interested persons who receive announcements of new issues as they are published.

bulletin no. 23

RESEARCH relating to CHILDREN

U.S. DEPARTMENT OF HEALTH EDUCATION AND WELFARE
SOCIAL and REHABILITATION SERVICE
children's bureau
1969

1306

CHILDREN'S BUREAU - P. Frederick DelliQuadri, Chief
Division of Research - Charles P. Gershenson, Director
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RESEARCH relating to CHILDREN

Bulletin 23

Current and recently completed studies on

- GROWTH and DEVELOPMENT
- PERSONALITY and ADJUSTMENT
- EDUCATIONAL PROCESS
- EXCEPTIONAL CHILDREN
- THE CHILD in the FAMILY
- SOCIOECONOMIC and CULTURAL FACTORS
- SOCIAL SERVICES
- HEALTH SERVICES

January-August 1968

CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price $1.75

FOREWORD

This Bulletin, like previous issues, includes reports of research in progress or recently completed. With the exception of the long-term research, it does not report again studies included in Bulletins 3 through 22 even though they may still be continuing. This issue, therefore, does not reflect all research relating to children in a given period but only that which was first reported to the Clearinghouse January through August 1968.

The Clearinghouse has only such information about the studies as the abstracts provide. Publication references and plans are given by some of the investigators but the Clearinghouse does not maintain bibliographic information on published reports of the studies. The reader who wishes to obtain further details about any of the projects reported should check professional journals in the appropriate field or write directly to the investigator.

For the Clearinghouse, I wish to thank those who have submitted reports on their own projects and those who have told us of other studies, and to acknowledge the valuable assistance of the Science Information Exchange, and the foundations which provide us with information about their research grants.

P. Frederick DelliQuadri

P. Frederick DelliQuadri
Chief, Children's Bureau
SOCIAL AND REHABILITATION SERVICE

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To Research Investigators:

This publication is only as complete as you are willing to make it. Page 161 is a form for letting us know of other investigators who are working in the field. Page 158 is a form for reporting your own current research. Please let us hear from you.

Clearinghouse for Research in Child Life

LONG-TERM RESEARCH

Note: The reports in this section
concern research programs which are
more or less continuous.

23-AA-1 THE CHILD RESEARCH COUNCIL

Purpose: To conduct life-span investigations of growth, development, and adaptation of healthy volunteer subjects.
Subjects: 215 healthy middle and upper-middle class volunteers from Denver, ages 1 year to 48 years.
Methods: Current operation is limited to analysis of data collected since 1930 in the areas of physical growth, roentgenographic studies of growth, nutritional intakes, health records, and selected areas of biochemical and functional development. Data are being organized on electronic tape for computer analysis. Projected activity in the coming year includes analysis and publication.
Duration: 1930-continuing.
Investigator(s): Robert W. McCammon, M.D., Director, Virginia A. Beal, M.P.H., Nutritionist, Edith Boyd, M.D., Pediatrician, Charlotte Hansman, M.D., Anthropometrist and Assistant in Roentgenology, Marion M. Maresh, M.D., Roentgenologist, Aldula Meyers, Ph.D., Hematologist, and Virginia E. Trevorrow, Ph.D., Biochemist, Child Research Council, 4200 E. Ninth Ave., Denver, Colo. 80220.
Cooperating group(s): University of Colorado Medical Center; Commonwealth Fund; National Dairy Council; Gerber Products Co.; Nutrition Foundation; Phipps Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Reprint lists available from Dr. McCammon.

23-AA-2 ANALYSIS AND EVALUATION OF DATA FROM THE LONGITUDINAL STUDY OF CHILD HEALTH AND DEVELOPMENT BASED UPON MULTIDISCIPLINE AND PERIODIC OBSERVATIONS OF INDIVIDUAL CHILDREN FROM BIRTH TO 18 YEARS

Initiation date: 1930.
Investigator(s): Research has been discontinued, but the analyses of data and preparation of reports are being continued by individuals under the direction of Robert B. Reed, Ph.D., Professor and Head, Department of Biostatistics, Harvard School of Public Health, Boston, Mass. 02115.

23-AA-3 LONGITUDINAL STUDY OF CHILD GROWTH AND DEVELOPMENT

Purpose: Program consists of study of adult personality, adjustment, and aging processes of individuals whose health, growth, personality development, and environment have been studied since birth. It included a study of the aging processes of their parents in relation to physical and biochemical measures made earlier. It will include studies of: parental childrearing attitudes and practices of two generations in the same families; constancy of autonomic response patterns to stress from childhood to young adulthood and their relationship to psychosomatic disorders in adulthood; blood lipids in relationship to body composition and change in composition.
Investigator(s): Lester W. Sontag, M.D., Director, Fels Research Institute for the Study of Human Development, Antioch College, Yellow Springs, Ohio 45387.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

23-AA-4 LONGITUDINAL CROSS-CULTURAL STUDY OF HUMAN DEVELOPMENT

Purpose: To observe the long-term effects of environment upon growth and health, that is, the influence of environmental factors upon physical and mental development, and the elucidation of their mode of action and interaction with genetic endowment.
Subjects: Several hundred males followed from prepuberty, all with four grandparents from the same limited geographical zone of southern Italy but now living in the markedly different cultures of Boston, Rome, and Palermo; other groups of 100 girls and several hundred boys in Florence, Italy and 200 girls in Boston.
Methods: Repeated medical, anthropometric, and psychological examinations together with family interviews (with evaluation of childrearing practices), nutrition, and sociocultural data.
Findings: Reported in numerous articles in American and European journals. Current work under analysis includes cross-cultural study of moral values, studies of biological age and its estimation, estimation of socioeconomic status across cultures, blood groups and temperament, and changing hemoglobin values in adolescent males. Work involving further and continuing data collection includes prediction of growth variables, cross-cultural study of creativity and its environmental determinants, a study of left-handed subjects in the relatively "permissive" and "intolerant" cultures of the United States and Italy, and an analysis of menstrual symptoms in both cultures.
Duration: 1956-1968.
Investigator(s): Harben Boutourline Young, M.D., Research Associate in Human Growth and Development, Harvard School of Public Health, Boston,

Mass. 02115; present address: Harvard Florence Research Project, Via Venezia 10, Florence, Italy.
Cooperating group(s): Grant Foundation; Wenner Gren Foundation; Olivetti Corporation; Universities of Florence, Rome, and Palermo.
Publications: Perceptual and Motor Skills 23:35-40, 1966; Bulletin of the International Epidemiological Association 12:1936, 1965; American Journal of Diseases of Children 106:568-577, 1963; papers and other articles; one book planned, another possible.

23-AA-5 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT

Purpose: To investigate the relationship of biologic, genetic, and environmental factors in the parents--including events during pregnancy, labor, and delivery--to normal and abnormal development of offspring. Expected byproducts of investigation are relationships of these factors to pregnancy wastage in the form of early fetal death, perinatal mortality, infant and childhood mortality, and estimates of incidence of different types of abnormalities. In addition, detailed growth curves for children from birth to six years of age will be derived on a longitudinal basis, also estimates of illnesses and injuries in infancy and the preschool child.
Subjects: Members of the Kaiser Foundation Health Plan--a prepaid medical care program--who reside in the San Francisco-East Bay Area.
Methods: Study is of a prospective, longitudinal type for both mother and child. Observations are made on the gravidas in the Department of Obstetrics and Gynecology, and on the children in the Pediatric Department, and are supplemented by special interviews and laboratory examinations. Physicians' observations are systematized and made more uniform. Special efforts are made to obtain information on members of study who do not return to the plan for medical care.
Duration: July 1959-indefinite.
Investigator(s): Jacob Yerushalmy, Ph.D., Professor of Biostatistics, School of Public Health, University of California, Berkeley; Stephen Thomas, M.D., Director, Department of Obstetrics and Gynecology, and Edgar Schoen, M.D., Director, Department of Pediatrics, Kaiser Foundation Hospital, Oakland, Calif.
Cooperating group(s): Permanente Medical Group; Kaiser Foundation Research Institute.
Publications: Journal of Pediatrics 71:2:164-172, August 1967; Pediatrics 39:940-941, 1967; American Journal of Obstetrics and Gynecology 88:4:505-518, February 15, 1964; other articles.

23-AA-6 THE BERKELEY (CALIFORNIA) GROWTH STUDY

Purpose: A study of the mental and physical growth of normally healthy persons from birth in 1928-1929 to the present.
Subjects: 60 full-term, healthy newborns, born in Berkeley, Calif. hospitals of white, English-speaking parents, if parents were interested--a somewhat selected above-average group; 140 offspring of these subjects, age range from a few months to about 20 years, seen irregularly, but same data (appropriate for age) collected that were collected for their parents.
Methods: Tests of mental and motor development; pediatric examination; interviews at frequent intervals during growth beginning in first week of life. At all visits, inquiries made concerning current health and recent illnesses. Anthropometrics, body photographs, and skeletal

X-rays taken at most ages. Socioeconomic data available. Adult records include mental tests, physical examinations, anthropometrics, and current status interview. Studies of physical aspects of growth include analyses comparing health histories with physical growth and with skeletal maturation. Some parent-child relations in susceptibility to illness could be studied. Emotional and other personality variables studied for consistency, and in various interrelations with maternal behavior in infancy, birth histories, socioeconomic status, intellectual and physical growth.
Duration: 1928-continuing.
Investigator(s): Nancy Bayley, Ph.D., and Dorothy H. Eichorn, Ph.D., Research Psychologists, Institute of Human Development, University of California, Berkeley, Calif. 94720.
Publications: American Psychologist 23:1:1-17, 1968; Monograph of the Society for Research in Child Development 28, 1963; Growth Diagnosis. Chicago: University of Chicago Press, 1959; others.

23-AA-7 MEDFORD, OREGON BOYS' GROWTH STUDY

Purpose: To construct physical and motor growth curves of boys 7 to 18 years of age; to relate physical and motor traits to physiological maturity, physique type, sociopersonal adjustment, interests, and scholastic aptitude and achievement.
Subjects: Cross-sectional samples: 40 boys at each age 9 through 15 years; longitudinal samples: 100 boys at ages 7, 9, 12, and 15 years; tested annually to 18 years.
Methods: Construction of growth and growth acceleration needs; extent of individual differences; contrasting extreme groups on various tests; zero-order, partial, and multiple correlations; factor analysis; multiple regression equations; special studies of athletes; and profile charts of outstanding athletes.
Findings: Contained in 62 master's and doctor's theses to date.
Duration: October 1955-June 1968.
Investigator(s): H. Harrison Clarke, Ed.D., Research Professor of Physical Education, School of Health, Physical Education, and Recreation, University of Oregon, Eugene, Ore. 97403.
Cooperating group(s): Oregon State Education Department; Southern Oregon College; Office of Scientific and Scholarly Affairs, University of Oregon Graduate School; Athletic Institute, Chicago.
Publications: Series of brochures planned, to be published by Prentice-Hall, Inc., Englewood Cliffs, N. J.

23-AA-8 GROWTH OF PSYCHOPHYSIOLOGICAL PATTERNS IN INFANCY

Purpose: To investigate the origins and course of development of individual differences in neonates. (See Research Relating to Children, Bull. No. 21-AA-8.)
Subjects: Normal, healthy full-term babies, 2 to 5 days old, born at Bronx Municipal Hospital Center.
Methods: A neonatal behavioral profile established in prior studies in this laboratory will be used. This profile includes behavioral and heart rate ratings on excitation, soothing, feeding, sleep, and non-stimulus periods of observation. Neonates will be followed at two weeks, one, two, three, and four months of age to measure the stability of early-appearing traits and their relation to later behaviors.

Findings: Data will be analyzed with respect to stability of early-appearing behaviors and relationship between neonatal behavior and maternal and birth history.
Duration: 1966-continuing.
Investigator(s): Wagner H. Bridger, M.D., Associate Professor of Psychiatry, and Beverly Birns, Ph.D., Assistant Professor of Psychology, Albert Einstein College of Medicine, Yeshiva University, Bronx, N. Y. 10461.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: In Early Experience and Behavior, Grant Newton and Seymour Levine (Eds.), in press, 1968; Psychosomatic Medicine 28:316, 1966; Child Development, September 1965; others.

23-AA-9 PHILADELPHIA CENTER FOR RESEARCH IN CHILD GROWTH

Purpose: To develop standards and norms of physical growth and development of normal, healthy children of the Philadelphia area.
Subjects: White and Negro children, male and female. Data are longitudinal (usually annual), based on two major samples: birth to 7 years, and 7 to 17 years. Cephalometric (measurement of head, face, jaws) and somatometric (trunk, limbs) standards of second group (white, colored) are already available; those of first group (white only) will be within the year.
Methods: Cephalometry and somatometry. Measurements are linear, transverse, sagittal, circumferential, skin thickness (via skin calipers), X-ray films of left hand (routinely) and of upper arm or lower leg (reduced number of cases); also of head and face in norma laterales sinistra and norma faciales (roentgenographic cephalometry). Dental models are taken in most cases. Histories secured are: (1) familial in terms of ethnic background and socioeconomic status; (2) medical (illness) and dental (occlusion, dental stage, oral habits); (3) genetic, in terms of the familial occurrence of trait(s) being considered. All data may be referred to several age categories: (1) chronological age (C.A.); (2) dental or eruptive age (D.A.); (3) skeletal or biological age (S.A.). All data have been put on microfilm, coded, and stored in computer memory. (1) School Series: initially based on 600 normal, healthy white school children from five Philadelphia schools, 6 to 12 years of age (ultimately followed to 22 schools). These children have provided the core data upon which our 7- to 17-year standards are based. (2) American Negro Series: based on the semiannual study of some 500 elementary school children. These children have provided the core data upon which our 7- to 17-year standards are based. (3) Orthodontic Series: now numbering some 2,700 children from the Orthodontic Clinics of the University of Pennsylvania (2,200) and the Children's Hospital (500). All of these children have been followed through their treatment course (two to four years, average). On about 10 percent of them there are posttreatment followup studies. (4) Cleft Palate Series: in cooperation with the Children's Hospital. These data are, for the most part, single preoperative roentgenographic cephalometric, plus selected somatometry (H, W, shoulder B, chest B and D, hip B, etc.). There are some 600 such records; in about 10 percent there are followup data. (5) Cooley's Anemia Series: based on some 120 children. Measurements, X-ray films, familio-genetic histories, and therapeutic treatment. Data are longitudinal, on an annual basis. (6) Endocrine and Chromosomal Series: seen on a referral basis from Children's Hospital. Data are followup, though sporadically and irregularly so.
Investigator(s): Wilton M. Krogman, Ph.D., LL.D., Director, Philadelphia Center for Research in Child Growth, and Professor and Chairman;

and Francis E. Johnston, Ph.D., Assistant Director, The Center, and Associate Professor of Anthropology, Department of Physical Anthropology; Geoffrey F. Walker, B.D.S., Director of the Philadelphia Center for Craniofacial Biology, and Research Associate in Orthodontics, Department of Orthodontics, Division of Graduate Medicine, University of Pennsylvania, Philadelphia, Pa. 19146.
Cooperating group(s): Children's Hospital of Philadelphia; Philadelphia Board of Public Education; School System, Archdiocese of Philadelphia; National Institute for Dental Research and National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-AA-10 GROWTH RESEARCH UNIT

Purpose: To gain insight into critical factors influencing growth patterns of all children by observing the growth and development of deviates, especially those with pathological diagnoses which have been medically documented.
Subjects: Children with congenital cardiac lesions, and children and adolescents with significant deviations of physical, neurological, and behavioral development.
Methods: Inspection, anthropometry, photography, X-ray of the left hand and wrist. Analysis of these basic data for current status and for growth trends.
Duration: 1929-1969.
Investigator(s): Leona M. Bayer, M.D., Cochairman, Youth Clinic, Presbyterian Medical Center, San Francisco, and Adjunct Clinical Associate Professor of Medicine, Stanford University, Palo Alto; and Saul J. Robinson, M.D., 2300 California St., San Francisco, Calif. 94115.
Cooperating group(s): Institute of Medical Sciences; Service for Developmentally Handicapped Children.
Publications: Journal of Pediatrics 62:5:631-645, May 1963; Journal of Clinical Endocrinology and Metabolism 22:1127-1129, November 1962.

23-AA-11 LONGITUDINAL STUDY OF DENTOFACIAL, SKELETAL, PHYSICAL GROWTH, AND NUTRITION OF CHILDREN

Purpose: To study the dentofacial growth of children, standards of nutrition, caries increment as related to nutrition, assessment and skeletal age as related to facial growth, variations in physique and its effect on dentofacial growth. Twins are also being studied to determine heritable traits.
Subjects: 400 children, including 40 pairs of twins, ages 3 to 18 years, who have been observed for periods of 3 to 10 years.
Methods: Cephalograms, hand, wrist, and calf X-rays, intraoral X-rays, study casts, anthropometric measurements, photographs, oral examination, and one-week food diary. Children are examined every six months until 14 years of age.
Initiation date: 1950-continuing.
Investigator(s): Bhim S. Savara, D.M.D., M.S., Professor and Chairman, Child Study Clinic, Dental School, University of Oregon, Portland, Ore. 97201.
Cooperating group(s): Oregon State Board of Dental Examiners; Tektronix Foundation, Inc.; Medical Research Foundation of Oregon; National Dairy Council; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Growth 31, 1967; Human Biology, May 1967; Archives of Oral Biology 12, 1967; others.

23-AA-12 RADIOGRAPHIC ATLASES OF SKELETAL DEVELOPMENT

Purpose: To develop radiographic standards of skeletal development for use as reference standards for children.
Methods: Series of films of hand, elbow, shoulder, hip, knee, and foot of healthy children are used to identify the modal (moderate) rate of bone development. Revisions of the 1955 Knee Standard and the 1959 Hand Standard have been tested since 1965.
Investigator(s): S. Idell Pyle, Ph.D., Research Associate, Department of Anatomy, Western Reserve University School of Medicine, Cleveland, Ohio 44106; and William W. Greulich, Ph.D., Research Biologist, National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.
Publications: The Knee Standard is scheduled for publication in 1968.

Note: The Bulletin expects to have more current information on this study in the next issue.

23-AA-13 COLLABORATIVE STUDIES IN CEREBRAL PALSY AND OTHER NEUROLOGICAL AND SENSORY DISORDERS OF INFANCY AND CHILDHOOD

Purpose: To investigate factors and conditions affecting parents: (1) conditions of pregnancy itself, such as infections, trauma, bleeding, drugs, and progress of labor; (2) environmental factors influencing mother, such as social and economic conditions, emotional stress, and medical care; (3) biological factors in parents, such as age, parity, medical and reproductive history, and immunologic characteristics; (4) genetic background of parents. To investigate in the offspring: disorders of the nervous system of all products of conception at time of delivery or appearing during infancy or early childhood, including cerebral palsy, mental subnormality, behavioral disorders, etc. A detailed investigation of the independent variables will be directed toward the reevaluation of the effect of factors already suspected, the elucidation of the mechanism through which these factors are operative, and the discovery of factors neither presently known nor suspected.
Subjects: Approximately 8,000 live births per year from collaborating institutions for five years. Offspring followed until school age.
Methods: Analysis of pooled information collected in a uniform way in a number of medical centers throughout the country from women studied during pregnancy and from their offspring followed throughout infancy and early childhood. Intensive study of limited number of cases; less intensive study of as many damaged children and abnormal pregnancies as possible.
Initiation date: 1956-continuing.
Investigator(s): Heinz W. Berendes, M.D., National Institute of Neurological Diseases and Blindness, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014. Collaborating institutions: Charity Hospital, New Orleans, La.; Johns Hopkins University School of Medicine, Baltimore, Md.; Boston Lying-In Hospital and Children's Medical Center, Boston, Mass.; University of Minnesota Medical School, Minneapolis, Minn.; Columbia-Presbyterian Medical Center and New York Medical College, New York, N. Y.; University of Buffalo, Buffalo, N. Y.; University of Oregon Medical School, Portland, Ore.; Children's Hospital of Philadelphia and Pennsylvania Hospital, Philadelphia, Pa.; Brown University, Providence, R. I.; University of Tennessee Medical School, Memphis, Tenn.; Medical College of Virginia, Richmond, Va.

Publications: Bibliography available from Dr. Berendes; in Research Methodology and Needs in Perinatal Studies, Chapters 5 and 6, S. S. Chipman, A. M. Lilienfeld, B. G. Greenberg, and J. F. Donnelly (Eds.). Springfield, Ill.: Charles C. Thomas, 1966; Summary of Progress in Collaborative Perinatal Research (A Nationwide Mother-Child Study), Public Health Service Research Profile No. 9, PHSP No. 1161, 1964.

23-AA-14 METHODS IN CHARACTER DEVELOPMENT

Purpose: To develop more effective methods in character development in cooperation with families and character-training agencies. (Character is defined in terms of three dimensions: philosophy of values, breadth of social vision, and strength of purpose.)
Subjects: Children and families throughout the United States. These are in churches, YMCA's, and schools, and participate as individual families.
Methods: The methods of development are based on action research, in which the participants cooperate with the laboratory, using methods of coscientist research. Open-ended reports on research goals constitute the basic body of research data. An analysis of these data serves as the basis for the development of new procedures and for the scientific reports which are published concerning it.
Findings: Reports have been prepared concerning hypotheses being tested in the home and character-building agencies. Most of the findings relate to the home, learning, decisionmaking, and methods for character development, plus descriptions of age-level potentials, especially for decisionmaking.
Initiation date: 1935-continuing.
Investigator(s): Ernest M. Ligon, Ph.D., Director, Leona J. Smith, Ph.D., Research Associate, and staff, Union College Character Research Project, 10 Nott Terrace, Schenectady, N. Y. 12308.
Cooperating group(s): Lilly Endowment, Inc.
Publications: Character Potential: A Record of Research; How to Stand Up for What You Believe, Herbert J. Detweiler. New York: Association Press, 1966; The Marriage Climate, Ernest M. Ligon and Leona J. Smith. St. Louis, Mo.: Bethany Press, 1963; others.

23-AA-15 LONGITUDINAL STUDIES OF CHILDREN WITH CRANIOFACIAL BIRTH DEFECTS

Purpose: To study the epidemiology, genetics, morphology, physiology, and postnatal development of congenitally deformed craniofacial structures.
Subjects: 2,000 subjects.
Methods: Most subjects were initially studied as infants. Procedures include roentgencephalometry and tomography, dental casts, photographs, and speech and hearing, psychosocial, and pediatric evaluations.
Duration: 1949-continuing.
Investigator(s): Samuel Pruzansky, D.D.S., Director, Center for Craniofacial Anomalies, University of Illinois Medical Center, Chicago, Ill. 60612.
Cooperating group(s): Illinois State Pediatric Institute; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Multiple articles in journals of dentistry, medicine, public health, speech and hearing, psychology, and research; list of publications available from Dr. Pruzansky.

GROWTH AND DEVELOPMENT

General

23-BA-1 ASSESSMENT OF ADOLESCENT ADJUSTMENT PATTERNS

Purpose: To gain insight into basic adolescent adjustment processes, especially as they pertain to a public school setting, in order to go beyond diagnosis to provide a basis for an understanding of the psychodynamics of adolescent adjustment as well as to predict therapeutic intervention if necessary.
Subjects: High school boys and girls, ages 12 to 18, representing cumulative referrals to Psychological Services; representative samples of regular students.
Methods: Kahn Test of Symbol Arrangement used as a screening device; supportive data obtained from battery of tests including Wechsler, Bender, DAP, and WRAT.
Findings: Seventeen adjustment patterns were assessed, including two "normal" ones. The KTSA Symbol Pattern (SP) lends itself to gaining insight into the psychodynamic process of adolescent adjustment.
Duration: Fall 1967-Spring 1969.
Investigator(s): Rudolph F. Wagner, Ph.D., Chief Psychologist, Richmond Public Schools, 809 E. Marshall St., Richmond, Va. 23219.
Publications: Paper to be read at American Psychological Association meeting; reprints available from Dr. Wagner. Journal publication planned.

23-BA-2 CHILD DEVELOPMENT RESEARCH PROJECT--A FOLLOWUP STUDY

Purpose: To follow through the first year of elementary school the subjects of the Infant Development Project who have been classified as having been subjected to seven types of maternal handling geared to the first year of life, and who differ in developmental quotient and in signs of advancement and disturbance according to the type of maternal handling. Study proposes specifically to ascertain whether and how the type of maternal handling during the first year of life is related to (1) the outcome of such critical periods as weaning, toilet training, and the establishment of sexual identity for the child; (2) the way in which the parents, particularly the mother, handle these critical periods; (3) school adjustment at the end of the first year of elementary school; (4) the intelligence quotient, fantasy life, ability to conceptualize, and degree of psychological conflict in the child through the end of the first year of school.
Subjects: 130 white children of intact families, of normal birth, born at Lenox Hill Hospital in New York City; their mothers.
Methods: Children, and their parents, will be interviewed at ages two, two and one-half, three, four, five, and six, and psychological tests, including Stanford-Binet, WISC, and Children's Apperception Test administered at appropriate ages. At age six, capacity for abstract thinking will be measured, and at each age, there will be an objective assessment of mother-child interaction, using a structured situation. The adjustment of the child in nursery school, if applicable, and during the first year of elementary school will be evaluated.

Duration: November 1967-August 1973.
Investigator(s): Sylvia Brody, Ph.D., Director, Child Development Research Project, 345 E. 81st St., New York 10021; and Sidney Axelrad, D.S.Sc., Dean of Graduate Studies, Queens College, City University of New York, Flushing, N. Y. 11367.
Cooperating group(s): Grant Foundation.
Publications: Books and articles planned.

23-BA-3 STUDY OF INFANT VOCALIZATIONS

Purpose: To analyze the early cry behavior of newborn infants to detect early brain damage, genetic defects, and other disorders.
Methods: The sound spectrograph and a new method of continuous spectrography are being used to study the structure of early vocalization. Infants are studied in the newborn nursery of the Langley Porter Neuropsychiatric Institute and again at followup visits to the pediatrician or clinic. Infants are usually recorded in the presence of the mother. The development of cooing or babbling is being studied, since delays or absences in this development may indicate that the child is physically or mentally disturbed.
Duration: 1968-1969.
Investigator(s): Peter Ostwald, M.D., Psychiatrist, Langley Porter Neuropsychiatric Institute, 401 Parnassus Ave., San Francisco, Calif. 94122.

23-BA-4 RELATIONS BETWEEN HUMAN NEONATAL BEHAVIOR AND LATER DEVELOPMENT

Purpose: To locate aspects of newborn behavior and physiology and to relate these aspects to social response and vigor of reaction to environmental obstacles in later stages of development.
Methods: Galvanic skin potential (GSP) was studied in a small sample of newborns to ascertain whether spontaneous level was stable over periods of 24 hours or less. In another phase, a criterion measure of social response at four months of age was developed.
Findings: Marked differences in GSP level were found between sessions, but pattern of change during sleep could be characteristic of the individual newborn. Contrary to findings on adults, GSP showed greater variability during rapid eye movement (REM) sleep, and contrary to results on respiration and heart rate in young infants, there was no increase in GSP level during REM phases. In the study of social response, preferential visual attention increased with increases in degree of resemblance of stimuli to a human face, not with increases in complexity, thus demonstrating a transitive perceptual ordering according to a social form at four months of age.
Duration: 1967-1970.
Investigator(s): Thomas C. Douthitt, Ph.D., Research Psychologist, Section on Infant Development, and Richard Q. Bell, Ph.D., Chief, Child Research Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-BA-5 RELATIONS OF PRESCHOOL BEHAVIOR TO EARLIER PARENT AND CHILD CHARACTERISTICS

Purpose: To establish measures of parent and child characteristics at the preschool and early school level.
Subjects: Children for whom preparental, newborn, early infancy, and preschool data are available.

Methods: Children are observed in free play and in experimental situations in a five-week period of attendance at a research nursery school. Effort is concentrated on measurement of social development and persistence in overcoming obstacles. Intelligence and cognitive style are studied in six- and seven-year-old children who are tested in the laboratory for two hours while the mother is interviewed.
Findings: Preliminary results indicate a negative relation between suck rate and vigor of response to interruption of sucking during the newborn period, and dependency on supportive adult figures in the preschool period. In a separate sample, dependency in the preschool period has been found to be positively related to relational thinking in cognitive tasks and negatively to nonverbal intelligence near age six.
Duration: Not reported-1972.
Investigator(s): Charles F. Halverson, Jr., Ph.D., and Lawrence Harper, Ph.D., Staff Fellows, and Mary F. Waldrop, Director of Nursery School, Child Research Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-BA-6 AUTOMATED, SELF-REGULATED STIMULUS ENRICHMENT FOR INSTITUTIONALIZED INFANTS AND YOUNG CHILDREN

Purpose: To increase availability of reciprocal language, social, and other stimulus values for infants confined by various handicaps to restricted stimulus and behavioral environments; to investigate the effects of experimentally controlled audiovisual feedback variables upon the children's discrimination of and preference for self-selected enrichment stimuli; to investigate the effect of this form of stimulus enrichment on development.
Subjects: Presumed normal, identified retarded, and otherwise handicapped institutionalized children, ages nine months to eight years.
Methods: Automated devices are employed which allow cribbound infants to choose between pairs of audiovisual feedback stimuli by making simple operant responses on manipulanda attached to the crib. Devices permit maintenance of experimental control over any audio stimuli that can be recorded on common audiotape and any visual stimuli that can be presented by slide or movie projectors. A response register records the frequency, duration, and distribution in time of all responses, permitting the analysis of discriminative patterns of stimulus-producing behavior. Stimulus programs are adjusted to suit the level of feedback discrimination and recognition demonstrated by each child.
Findings: Normal and variously handicapped children physically capable of making minimal operant responses perform at high levels to produce audiovisual stimuli that include conversational voices, rhythmic music, and still and moving pictures of familiar and unfamiliar persons and objects. Differentiated responding among pairs of different stimuli offered simultaneously indicate discrimination of stimulus differences and demonstrated feedback preferences by children previously not believed capable of making fine-grained discriminations and behavioral differentiations. Changes in response patterns over days and weeks suggest developmental capabilities not previously noted.
Duration: September 1967-not reported.
Investigator(s): Bernard Z. Friedlander, Ph.D., Research Psychologist, Department of Rehabilitation Psychology, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Central Wisconsin Colony and Training School, Madison, Wis.
Publications: Preliminary report in American Journal of Mental Deficiency 71:6:909-919, 1967. Reports presented at the Society for Research in Child Development, 1967. Papers to appear in psychological and rehabilitation journals.

23-BA-7 PROGRAM IN CHILD WELFARE RESEARCH

Purpose: To study the development of disadvantaged children from early infancy to age seven in three environments--foster families, their own families, and a group residential care setting.
Subjects: Pilot group of 22 children, ages 13 months to 4-1/2 years, attending Yale University Child Study Center; neonates in biological and foster families, and a group of infants and children residing in Children's House.
Methods: Major services being provided are social work services to families, health care, and a program of day care and education for children. Study of pilot group has resulted in improvement of methods of study and delivery of services, and has helped to work out some of the problems involved in developing a well-functioning multidisciplinary research group. Longitudinal study of children will include physical health and growth, neurological, cognitive, and emotional development, and social adaptation and adjustment in family, with peers, and in the neighborhood and school.
Duration: July 1967-June 1972.
Investigator(s): Sally Provence, M.D., Director, and Audrey K. Naylor, M.S.W., Assistant Director, Yale University Child Study Center, New Haven, Conn. 06510.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

Physical

23-CB-1 CONTRIBUTORY FACTORS IN CHILDHOOD OBESITY

Purpose: To determine some of the factors contributing to obesity in children.
Subjects: 80 children in middle elementary grades.
Methods: Interviews with parents of 25 of the subjects; analysis of sociometric and socioeconomic data on all subjects. Information on 22 of the children provides the basis for an analysis and comparison of various methods for obesity assessment in middle childhood and the derivation of an equation for estimating body density in children from anthropometric measurements.
Findings: Analysis of data indicates that a prediction for body density is possible using only cheek and abdomen measurements. Validation of the prediction equation is in progress.
Duration: 1960-indefinite.
Investigator(s): Gertrude Couch, Ph.D., Wayne State University, Detroit, Mich. 48202; Queenie B. Mills, Ed.D., Willie M. Mowrer, Ph.D., and Philip O'Neill, Ph.D., Department of Home Economics, Agricultural Experiment Station, University of Illinois, Urbana, Ill.
Cooperating group(s): State of Illinois.

23-CC-1 THE DEVELOPMENT OF TOUCH AND VISION IN YOUNG CHILDREN

Purpose: To determine children's abilities to discriminate stimulus differences in shape and texture both visually and haptically; to assess the basis for dimensional preferences noted at specific ages.
Subjects: Kindergarten and third grade normally sighted children, blind elementary school children, and sighted college undergraduates.

Methods: All studies were conducted both visually and haptically, with identical procedures and stimuli. Studies designed to measure discriminative abilities used a psychophysical technique in which the children made "same-different" judgments on pairs of ellipses varying from round to elliptical and pairs of sandpaper varying from very coarse to smooth. Mean difference thresholds were calculated on the basis of each child's judgments. In the preference studies, a conflict-of-cues design was used in which the child had to discriminate between two objects differing in shape and texture. In the transfer phase, the combination of specific dimensional values was reversed, so that one could infer the dimensional basis of the original discrimination. The discriminability of the shape and texture differences (psychophysical data) was strictly controlled to assess the effect of this variable in preference.
Findings: Children improve in their ability to detect texture differences in touch but not in shape. Blind children are not significantly different from sighted third graders, nor are adults. In vision there is no age improvement in either dimension. Haptically, kindergarten children prefer to discriminate objects on the basis of texture, while third graders prefer shape. Visually, all ages prefer to use shape. When the discriminability of the differences on the preferred dimension is reduced drastically, the preference will change to the previously nonpreferred dimension which is now much more discriminable, but the difference in the discriminability of the two dimensions must be very large.
Duration: September 1966-December 1967.
Investigator(s): Anne D. Pick, Ph.D., National Institute of Child Health and Human Development Post-Doctoral Fellow, Herbert L. Pick, Jr., Ph.D., Professor of Psychology, and Cynthia Rae Gliner, Ph.D., Research Associate, Institute of Child Development, University of Minnesota, Minneapolis, Minn. 55455.
Cooperating group(s): Fridley, Minn. and Roseville, Minn. Public Schools; Foundation for the Junior Blind, Los Angeles, Calif.; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Journal of Experimental Child Psychology, article in preparation, 1967.

23-CC-2 AUDITORY AND VISUAL LEARNING OF A PAIRED ASSOCIATE TASK BY KINDERGARTEN CHILDREN

Purpose: To explore the use kindergarten children make of visual and auditory cues in a paired associate task.
Subjects: 32 kindergarten children from a middle class neighborhood; 12 children from a Head Start program.
Methods: A list of words selected from preprimers used in the New Orleans public schools and originally employed with first and second grade children was grouped together randomly to form four lists of eight word pairs each. Children were given preliminary training in the paired association situation followed by both the visual and auditory lists in counterbalanced order with approximately 30 minutes between the lists.
Findings: Kindergarten children, like first and second grade children, perform more efficiently on a paired associate task if they are using visual rather than auditory cues. These data are in agreement with other studies which indicate that by age five, children show visual dominance in a variety of perceptual tasks.
Duration: 1967-continuing.
Investigator(s): Suzanne D. Hill, Ph.D., Associate Professor of Psychology, and Sandra Loucks, Louisiana State University, Lakefront, New Orleans, La. 70122.
Publications: Paper presented at Southwestern Psychological Association Meeting, April 1968.

23-CD-1 SLEEP OF THE NEONATE

Purpose: To determine the interaction of behavior during sleep and physiological variables; to develop indices of psychological and physiological maturation; to measure effects of certain environmental variables on sleep.
Subjects: One- to five-day-old infants.
Methods: Infants are observed during sleep, and polygraph recordings are made of eye movement, respiration, heart rate, and EEG.
Findings: Clear-cut interaction of behavior and physiological variables provides some justification for using either alone. Age and noise seem to change sleep in selective ways.
Duration: 1966-1971.
Investigator(s): James G. Minard, Ph.D., Research Psychologist, and Assistant Professor, and Donald Coleman, M.D., Psychiatrist, and Assistant Professor, Western Psychiatric Institute and Clinic of the University of Pittsburgh, 3811 O'Hara St., Pittsburgh, Pa. 15213.
Cooperating group(s): Magee-Womens Hospital.
Publications: Psychophysiology, in press, 1968.

23-CG-1 AN INVESTIGATION OF SELECTED FOOT PREFERENCE TESTS WITH FIRST GRADE BOYS AND GIRLS

Purpose: To determine whether various types of foot preference exist, and if so, what they are.
Subjects: 36 boys and 19 girls in first grade in Bellevue, Wash.
Methods: Nine foot preference tests, grouped according to purposes such as support, manipulation, takeoff, etc., were administered twice and data analyzed to determine consistency of foot usage with each task and to compare foot usage for various tasks. Comparison was made of number and percent of boys, girls, and total group who used same or opposite foot for two trials of task and who used same, opposite, or showed no preference for one of tasks.
Findings: Foot preference appears to be specific to task, although boys and girls tend to use the same foot for kicking as for hopping. As the height of the step in the step-up test increases, an increase in foot preference appears to be indicated. Subjects did not show a preference for a certain foot for various tasks involving support of body weight. Boys seem to show a preference for manipulative tasks.
Duration: Not reported.
Investigator(s): Marion R. Broer, Ph.D., Professor of Physical Education, University of Washington, Seattle, Wash. 98105.
Publications: Publication planned.

23-CH-1 A STUDY OF BEHAVIORAL COMPONENTS OF STUTTERED SPEECH

Purpose: To determine whether patterns in the visible and audible features of stuttered speech may provide a basis for the classification of different subgroups of stutterers and cues for evaluating those characteristics of speech which become altered as a consequence of therapy.
Subjects: 20-30 boys and young men, ages 15 to 21, who are stutterers.
Methods: Sound motion pictures were taken of subjects prior to and at the completion of an eight-week residential therapy program. Films will be analyzed at regular and frame-by-frame speeds so that the visible and audible characteristics of stuttering may be described and compared with each other.

Duration: May 1967-June 1968.
Investigator(s): David Prins, Ph.D., Associate Professor and Director, University of Michigan Speech and Hearing Camp, Ann Arbor, Mich. 48104.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Results will be published in a final research report and presented at professional meetings and in professional journals.

Intellectual

23-DA-1 SOCIAL REINFORCEMENT AND ANXIETY IN CHILDREN

Purpose: To study the effects of test anxiety, success-failure experiences in pretraining, and social reinforcement versus nonreinforcement on the level of aspiration of middle elementary school age children.
Subjects: 62 boys and 70 girls comprising the third and fourth grades of a suburban school system of Champaign-Urbana, Ill.
Methods: Sample was administered the Test Anxiety Scale for Children (TASC) approximately two weeks before experimental testing. Twenty-four children of each sex above and below median TASC score were tested experimentally. An equal number of children of each sex and TASC level were exposed to one of three pretraining experiences: success at easy puzzles, failure at difficult puzzles, or no evaluative experiences. In the experimental session subjects estimated their level of achievement compared to other children before and after they performed at an angle-matching task at which they could not evaluate their performance, while the male experimenter was either supportive or nonresponsive.
Findings: Success in pretraining raised and failure in pretraining lowered subjects' initial level of aspiration compared to children in the control condition. Level of aspiration did not change if experimenter was nonresponsive during the task. Level of aspiration increased when experimenter was supportive and more so for girls than boys.
Duration: June 1967-June 1970.
Investigator(s): Kennedy T. Hill, Ph.D., Assistant Professor of Psychology, University of Illinois, Urbana, Ill. 61801.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to a psychology journal in 1968.

23-DA-2 A STUDY OF INTELLECTUAL GROWTH AND VOCATIONAL DEVELOPMENT

Purpose: To trace the intellectual development of high school students who subsequently elect vocational as opposed to college preparatory curricula; to investigate the interaction over time of stated vocational plans, individual characteristics, environmental influences, and subsequent occupation; to develop a preliminary theoretical model of vocational development.
Subjects: 40,000 students.
Methods: A study of vocational orientation and preparation of American youth is being conducted using data from the "Study of Academic Prediction and Growth," a longitudinal study initiated in 1961. (See Research Relating to Children, Bull. No. 18-0-3.) Current project will supplement several batteries of test data from that investigation. Questionnaires and interview instruments are developed and administered to the same student population whenever possible. Followup questionnaire is given to those students who graduated during the time of the project.

Duration: Not reported-October 1968.
Investigator(s): Thomas L. Hilton, Ph.D., Senior Research Psychologist, Educational Testing Service, Princeton, N. J. 08540.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-DB-1 EARLY ENVIRONMENTAL INFLUENCES ON COGNITIVE AND PERSONALITY DEVELOPMENT IN INFANCY

Purpose: To identify some of the possible early antecedents of the cognitive deficits and personality disturbances commonly found in children from low socioeconomic backgrounds.
Subjects: 80 infants from economically disadvantaged homes; middle class control group.
Methods: Relationships between specific dimensions of the early environment and specified aspects of development in infancy are examined. Data on patterns of stimulation and of maternal care of infants in first year of life are obtained from repeated observations in naturalistic situations in the home. Assessment of the infant is based on observations in structured settings, in which several procedures are administered.
Duration: Not reported-July 1969.
Investigator(s): Leon J. Yarrow, Ph.D., Chief, Judith Rubenstein, Ph.D., Frank A. Pedersen, Ph.D., and Joseph J. Jankowski, M.D., Staff Members, Social and Behavioral Sciences Branch, National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-DB-2 LEARNING AND MOTIVATION AS A FUNCTION OF SOCIOECONOMIC LEVEL

Purpose: To determine the existence of different abilities to form abstractions; to identify those children who have cognitive defects and who need remedial training; to identify at an early age those children who will be most likely to require rewards more tangible and different from those offered in the usual classroom setting; to develop remedial programs to repair deficits in cognitive functioning as early as possible; to significantly reduce the downward spiraling of cognitive efficiency; to accumulate longitudinal data on the development of cognitive abilities.
Subjects: 800 children, ages four to seven, 200 in each group, drawn at random from high and low socioeconomic level populations as determined from two sets of specially selected census tracts in Atlanta.
Methods: Each subject is tested with two related but separate procedures. (1) Reward preference: each child is presented, at two different sessions, with a basket of eight various reward items from which he will be asked to select some and discard others. (2) Concept formation with high and low reward: on the basis of the reward preference results, one-half of the two socioeconomic groups will be assigned to the high or low reward groups. Each child will be given four tasks. One of the two-choice tasks will utilize stimulus figures which may be considered to be related to educational concepts, and the other will utilize universally known figures. The four-choice problems will be analogously educational or noneducational.
Duration: September 1965-August 1968.
Investigator(s): Irwin J. Knopf, Ph.D., Professor and Chairman, and Martin M. Shapiro, Ph.D., Associate Professor, Department of Psychology, Emory University, Atlanta, Ga. 30322.
Cooperating group(s): U. S. Office of Economic Opportunity.
Publications: To be submitted to psychological journals.

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23-DB-3 AIDING COGNITIVE GROWTH IN DISADVANTAGED PRESCHOOLERS

Purpose: To explore the effect on cognitive growth of socially disadvantaged preschool children of a compensatory intervention program in which the principal agent is ultimately the child's own mother.
Subjects: 64 lower class children, ages 20 to 43 months, living in a low income, predominantly Negro housing project in two different parts of Long Island; their mothers: 34 experimental and 30 control dyads.
Methods: All subjects are interviewed for background variables. Children are pretested with the Peabody Picture Vocabulary Test and the Cattell and Binet Intelligence Scales; mothers are given an experimental self-attitude rating scale. Experimental group is then exposed to verbally oriented play activity within the mother-child dyad for six months; activity is focused around selected toys and books and stimulated by regular visits by social workers. During this period, one-half of the control group receives "placebo" intervention in order to offset the "Hawthorne effect"; the remaining controls receive no intervention. All subjects are then retested with instruments used prior to six-month period, and the results are compared to determine the optimum "critical period" for intervention. In second year of study social workers were replaced by two kinds of nonprofessionals, paid aides (current experimental mothers) and volunteers.
Findings: Initial results indicate quantitative and qualitative evidence of increased verbal interaction in experimental dyads.
Duration: March 1967-June 1970.
Investigator(s): Phyllis Levenstein, M.S.S.W. (Ed.D. Candidate, Teachers College, Columbia University), Consulting Psychologist, and Robert M. Sunley, M.S.W., Assistant Director, Family Service Association of Nassau County, 286 Old Country Rd., Mineola, N. Y. 11501.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: *American Journal of Orthopsychiatry* 38:116-121, January 1968.

23-DB-4 COGNITIVE SYNTHESIS IN NEGRO AND WHITE CHILDREN

Purpose: To experimentally analyze the ability to integrate information when "triggered" by symbolic cues in three kinds of situations: verbal--integrating actions with logographs (whole word symbols), maplike--integrating spatial ideas, and mathematical.
Subjects: 212 Negro and white children, ages four to nine.
Methods: A normative study was made of effects of age, sex, race, and socioeconomic status on the three kinds of synthesis. A training study, utilizing Negro ghetto children only, assessed effects of four training conditions on verbal synthesis in five-year-olds; three training conditions on maplike synthesis in seven-year-olds; and two training conditions on mathematical (ordering) synthesis in four-year-olds. Only one of the verbal training conditions (overlearning both actions and word symbols) significantly passed performance of its control group and normative group. Currently, an attempt is being made to utilize the same training style (overlearning of actions and symbols) on maplike and mathematical synthesis tasks with Negro and white children.
Findings: In general, Negro children, as compared to white children, have special difficulty with spatial and mathematical information, but are superior in verbal-action synthesis. This may be the best pathway to cognitive training.
Duration: 1966-1968.
Investigator(s): Sylvia Farnham-Diggory, Ph.D., Assistant Professor of Psychology, Carnegie-Mellon University, Pittsburgh, Pa. 15213.

Cooperating group(s): Maurice Falk Medical Fund; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Paper to be submitted to Monographs of the Society for Research in Child Development by December 1968, if possible. Multilith preprints available from Department of Psychology, Carnegie-Mellon University.

23-DB-5 PATTERNS OF PERCEPTUAL, LANGUAGE, AND INTELLECTIVE PERFORMANCE IN CHILDREN WITH COGNITIVE DEFICITS

Purpose: To study the perception, language ability, and intellectual performance of children who have learning problems; to draw implications for special education for these children and for indicating minimal brain damage among them.
Subjects: First grade children from socially marginal backgrounds: one-half had participated in a preschool program emphasizing perceptual and language training, while the other half had no preschool experience.
Methods: The Verbal Identification Test, Socioeconomic Status Index, Cloze Test, Kendler Technique, and visual, auditory, and tactile masking tests were administered to subjects, and a behavior evaluation made. Performance patterns were related to school achievement at completion of first and second grades.
Duration: Completed.
Investigator(s): Cynthia P. Deutsch, Ph.D., Senior Research Scientist, Institute for Developmental Studies, New York University School of Education, New York, N. Y. 10003.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Final report in preparation, 1968.

23-DC-1 RETARDATION IN INTELLECTUAL DEVELOPMENT OF LOWER CLASS PUERTO RICAN CHILDREN IN NEW YORK

Purpose: To identify detrimental behavioral and intellectual patterns which retard learning; to determine those environmental factors which contribute to detrimental growth patterns as well as those which can be used to promote intellectual functioning.
Subjects: 250 disadvantaged Puerto Rican children in New York City; control group of advantaged middle class children.
Methods: Annual home visits and parent interviews provide data on characteristics of intrafamilial environment, childcare practices, written and spoken language usage, bilinguality, types of play material, parental aspirations and activities, and special environmental stresses and incidents. Information on each child's behavioral and perceptual patterns, levels of intellectual functioning and academic achievement, and cognitive style characteristics are obtained through various psychological test procedures and a teacher evaluation rating scale. Study variables are quantified through rating scale and item scoring procedures, and norms for each variable established and compared with those of the control population.
Duration: Not reported-May 1969.
Investigator(s): Alexander Thomas, M.D., Professor, Department of Psychiatry, New York University Medical Center, New York, N. Y. 10016.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-DC-2 STRUCTURE OF INTELLECT DETERMINANTS OF CONSERVATION

Purpose: To compare the factor structure of children at the preoperational level of thinking with that of children at the concrete-logical operations stage as exemplified by their attainment of conservation of quantity ability; to identify emergent intellectual processes at the four- to seven-year-old level.
Subjects: 200 six- and seven-year-old children; 200 four- and five-year-old children.
Methods: Hypotheses were developed regarding factors relating to conservation and those not expected to relate to conservation. A test battery was constructed and administered individually to the children, and data will be statistically analyzed and interpreted.
Duration: June 1967-June 1969.
Investigator(s): Russel E. Orpet, Ed.D., Professor of Educational Psychology, California State College, Long Beach, Calif. 90804.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-DC-3 DEVELOPMENT IN SYSTEMATIZATION OF THINKING

Purpose: To establish norms and ranges in standardized form and growth curves for a large battery of Piagetian items; to establish the amount of learning in each subtest resulting from practice and prompting; and to lay the basis for experimental studies of development in learning.
Subjects: 200 children, ages 5 to 10.
Methods: A battery of 21 tests, each comprising several subtests, is administered. Sample will be extended to 1,000 next year. Longitudinal and experimental studies will follow, using these norms as reference points.
Duration: February 1968-December 1969.
Investigator(s): E. A. Lunzer, Ph.D., Senior Lecturer, Department of Education, University of Manchester, Manchester 13, England.
Cooperating group(s): Colleges of Education and heads of primary schools.
Publications: Future publication planned.

23-DC-4 INVESTIGATION OF DIAGNOSTIC AND TREATMENT METHODS FOR SCHOOL CHILDREN WITH LEARNING DISABILITIES

Purpose: To assess the diagnostic value of medical, neurological, and psychological examinations in identifying school children with learning disabilities, and to observe results of individual remedial teaching; to evaluate the efficiency of certain psychological tests in identifying children with learning disabilities at grade two level, ages seven to nine.
Subjects: 41 children, ages 7 to 11, in two schools, referred by teachers, and controls; 165 children from 13 schools in grade two.
Methods: First group of children were given medical, neurological, and psychological examinations, WISC, Frostig, Percepto-Diagnostic, Reading tests, and ITPA. First 12 boys identified as having learning disabilities were given individual remedial teaching one-half hour daily in school. Controls were given same assessment, but no remedial teaching. Reassessment of WISC and reading tests was done at the end of the second year. All children in grade two who had repeated a grade, a random sample of those scoring low on the Metropolitan Achievement test, and a random sample of those achieving adequately were tested with WISC, Frostig, Wepman, and ITPA.
Findings: No single examination is adequate for diagnosis of learning disabilities. Children in remedial teaching group have improved more than controls, though not markedly in two years. Other variables, such

as home background, must be taken into account. Psychological tests alone will not discriminate between achievers and nonachievers at grade two level; some of the achievers scored low on various tests.
Duration: April 1966-March 1968.
Investigator(s): Ruth McDougall, M.D., D.P.H., Associate Professor, Department of Preventive Medicine, Dalhousie University, Halifax, Nova Scotia; present address: c/o CUSO Field Officer, P.O. Box 30748, Nairobi, Kenya, East Africa; and Barbara Archibald, M.A., Psychologist, 6 Highland Pl., Wolfville, Nova Scotia, (formerly) Research Fellow, Dalhousie University.
Cooperating group(s): Junior League of Halifax; City of Halifax School Department; Department of National Health and Welfare of Canada.
Publications: Publication planned; reports to be submitted to Research Development Section, Department of National Health and Welfare, Ottawa.

23-DC-5 RESPONSE TO VARYING LEVELS OF CONDITIONING REWARDS

Purpose: To study the means of establishing and strengthening certain positive reinforcers that may be used in teaching situations; specifically, to test hypotheses based on the principles of conditioned reinforcement and on the assumption that there is a hierarchical order of reinforcement.
Subjects: Children, ages 5 to 6-1/2, who are responsive to particular reinforcers.
Methods: Subjects took part in two experimental sessions to determine who was conditioned to approval and who was conditioned to confirmation. Each group was then tested to establish the effectiveness of newly determined reinforcers; those children who had been conditioned to use self-reinforcement were then tested by observing how well they learned from a programmed self-instructional lesson.
Duration: Not reported-June 1968.
Investigator(s): Robert E. Silverman, Ph.D., Professor and Chairman, Department of Psychology, University College of Arts and Science, New York University, Bronx, N. Y. 10453.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-DC-6 VERBAL DISCRIMINATION IN CHILDREN

Purpose: To investigate developmental trends in both intentional and incidental learning components of verbal discrimination tasks.
Subjects: Fourth, sixth, and eighth grade students, 24 in each grade, and 12 of each sex, from middle class grade schools.
Methods: Standard verbal learning procedures.
Findings: Covariation between intentional and incidental learning performance interacts with grade level.
Duration: 1967-November 1968.
Investigator(s): Donald H. Kausler, Ph.D., Professor and Chairman, Department of Psychology, St. Louis University, St. Louis, Mo. 63103.
Publications: To be submitted to Journal of Experimental Child Psychology.

23-DC-7 CURIOSITY BEHAVIOR OF NEGRO, MEXICAN-AMERICAN, AND WHITE LOWER CLASS FOUR- AND FIVE-YEAR-OLD CHILDREN

Purpose: To compare curiosity behavior among these three groups of children as part of an eventual aim of describing different modes of

curiosity behavior among different groups of children and relating these to the curiosity approach in curriculum planning.
Subjects: 30 Negro, 30 Mexican-American, and 30 white lower class children.
Methods: Visual curiosity is rated by the differential attention paid by the child to more and less complex and unusual stimuli. Behavioral curiosity rating consists of behavioral observation of (1) passive attention, (2) active manipulation of usual elements of stimulus objects, and (3) active manipulation and experimentation with unusual elements of stimulus objects. Verbal curiosity is rated by the number and type of questions asked in a free play situation with an adult.
Duration: February 1967-May 1968.
Investigator(s): Alfred A. Lucco, Ph.D., Assistant Professor, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Office of Research, University of California, Berkeley; Oakland Economic Opportunity Council; Merced County Superintendent's Office.

23-DC-8 MEMORY AND MENTAL IMAGERY IN YOUNG CHILDREN

Purpose: To replicate results reported by Piaget; to evaluate memory and mental imagery in retardates and economically deprived children.
Subjects: Nursery, kindergarten, and elementary school children up to age seven, from middle class and deprived environments; retardates matched for mental age.
Methods: Subjects are shown a set of sticks arranged in descending order. One week later and six months later, they are asked to reproduce the array. They then are asked to make the design with a comparable set of sticks, and finally, to pick the right design from four arrays.
Findings: Preliminary data indicate possible support of Piaget's position.
Duration: Fall 1967-Spring 1969.
Investigator(s): Mortimer Garrison, Jr., Ph.D., Professor of Psychology, College of Education, Temple University, Philadelphia, Pa. 19122.
Publications: Preliminary report presented at American Association on Mental Deficiency Meeting, Boston, 1968.

23-DC-9 RECONSTITUTIVE MEMORY IN KINDERGARTEN CHILDREN

Purpose: To investigate effects of time of reward and certainty of reward on reconstitutive memory; to replicate Piaget's finding of an improvement in such memory over a six-month period.
Subjects: Public school kindergarten children in Moorhead, Minn., assigned to a no-reward or reward condition. No within-classroom assignments were made to reward and no-reward conditions, or to immediate or one-week testing.
Methods: Subjects inspected 10 bars arranged in serial order for a two-minute inspection period. Immediately after inspection or one week later subjects were asked to reproduce the original display (test of memory). Some children were offered no reward, some were guaranteed a reward on completion of the reproduction, and for some, reward was contingent on accurate reproduction of the original display. Reward subjects were offered the reward either before inspection of the display or before reproduction of it. All children were encouraged to reproduce the original display as accurately as possible, and no child inspected the display after the original two-minute inspection period. All no-reward

subjects tested one week after inspection of the display who were still available after six months reproduced the display again at that time. The frequency of correctly placed bars constituted child's reproduction score which served as an index of reconstitutive memory.
Findings: No child making a perfect reproduction at one week failed to do so at six months. Many scores improved over the six-month period, but very few deteriorated. Contingent reward, when presented just before one-week reproductions, yielded more perfect scores than either no reward or guaranteed reward under the same conditions. There were fewer perfect scores with one week than with immediate reproduction in no reward and guaranteed reward but not in contingent reward when reward immediately preceded reproduction.
Duration: October 1967-Completed.
Investigator(s): Nancy Wray Dahlem, Ph.D., Assistant Professor of Psychology, St. Louis University, St. Louis, Mo. 63103.
Cooperating group(s): Moorhead State College.
Publications: To be submitted to *Psychonomic Science*.

23-DC-10 STIMULUS SELECTION IN DISCRIMINATION LEARNING

Purpose: To study a number of theoretical problems in discrimination learning using a more precise measure of the dependent variable.
Subjects: Eight-year-old children.
Methods: An objective record, by means of an eye movement camera and specially designed stimulus configurations, is made of the amount of time a child spends "attending" certain stimulus elements, as well as the area screened in a stimulus configuration. A discrimination learning apparatus is used to examine the way in which development affects learning in certain discrimination learning tasks, including the over-training reversal effect, the influence of relevant and irrelevant stimuli, and the informational value of the stimulus.
Duration: June 1967-August 1969.
Investigator(s): Vincent J. Tempone, Ph.D., Associate Professor of Psychology, University of Arizona, Tucson, Ariz. 85721.
Cooperating group(s): Early Childhood Research and Development Center, University of Arizona; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Will submit publications to appropriate developmental psychology journals.

23-DC-11 SOCIAL CLASS, RACE, SERIATING AND READING READINESS: A STUDY OF THEIR RELATIONSHIP AT THE KINDERGARTEN LEVEL

Purpose: To gain information concerning the significance of seriation skills on young children's cognitive growth, and to test the Inhelder-Piaget postulation that a close association exists between children's ability to seriate and classify (or between language and perceptual development).
Subjects: All the 356 kindergarten students of four Waterloo, Iowa schools which were selected so that racial and social class differences could be assessed.
Methods: The LRS Seriation Test (LRS-ST) was administered and results compared with scores on the Metropolitan Reading Readiness Test (MRRT). It was predicted that LRS-ST scores will be significantly correlated with subtest and total MRRT scores, and that Negro and lower class children will obtain significantly lower LRS-ST scores than white or middle class children. Subsequent assessments, to determine the predictive characteristics of the LRS-ST and the MRRT, are planned.

Findings: Correlations of the LRS-ST with total MRRT and the Reading Readiness and Number Readiness subtests of the MRRT were .82, .77, and .69, respectively; these correlations indicate that seriation is an important aspect of early intellectual growth and appear to support the Inhelder-Piaget position concerning the interaction of seriation and classification. White children attained significantly higher LRS-ST scores than Negro children, but no statistically significant social class differences were obtained. The nonsignificant social class differences appear associated with narrow within-race but wide between-race LRS-ST differences.
Duration: May 1966-continuing.
Investigator(s): Ralph Scott, Ph.D., Director, Educational Clinic, University of Northern Iowa, Cedar Falls, Iowa 50613.
Cooperating group(s): Office of Research, University of Northern Iowa; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Journal of Genetic Psychology, in press, 1968.

23-DD-1 MIRROR IMAGE FORM CONFUSION IN RELATION TO AGE AND INTELLIGENCE

Purpose: To determine whether the young child's tendency to confuse mirror image (MI) forms is due to his inability to "see a difference" between them, and whether the confusion of such forms is related to general ability as measured by a verbal and nonverbal intelligence test.
Subjects: 65 normal elementary school children in kindergarten through third grade.
Methods: Children judged pairs of patterns projected on a screen "same" or "different" by pressing one of two large keys, and reported when side-to-side movement appeared when the rate of alternation of two forms was varied (Phi threshold). Components of pattern pairs differed only in orientation: they were mirror image, different; nonmirror image, different; or identical. All subjects were given Raven's Colored Progressive Matrices (children seven or under, Formboard version; those over seven, Book version) and the PPVT.
Findings: Many of the children judged some MI pairs as "same" but all 65 gave clear evidence, in the paired comparison task or by showing which way the forms pointed, of their ability to "see a difference" between the forms. The Phi technique gave no evidence of discrimination: thresholds for MI and identical pairs did not differ significantly. Raven's Matrices and MI scores correlated significantly ($r = .46$, $P < .01$). PPVT and MI scores showed a lower, but still significant, correlation ($r = .21$, $P < .05$).
Duration: July 1965-June 1968.
Investigator(s): John S. Robinson, Ph.D., Research Psychologist, Sonoma State Hospital, State Department of Mental Hygiene, Eldridge, Calif. 95431.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Perceptual and Motor Skills 25:893-897, 1967; additional publications planned.

23-DE-1 DEVELOPMENTAL STUDY OF DISJUNCTIVE CONCEPT LEARNING, EGO SYNTHESIZING CAPACITY, AND CREATIVITY

Purpose: To obtain basic information about disjunctive concept learning and to study its theoretical and experimental relevance as a miniature model for unifying other areas of developmental psychological functioning.
Subjects: Children, ages five to nine.
Methods: Overall experimental design is an analysis of covariance for repeated measurements. Effects of the stimulus variables of concept complexity and redundancy on the disjunctive concept learning of subjects

will be studied. Theoretical and logical considerations suggest that disjunctive concept learning may provide both a heuristic cognitive model and an experimental task for studying developmental characteristics of the ego's synthesizing capacity and of the divergent thinking aspect of creativity. Possible positive relationship between synthesizing ability and divergent thinking will be evaluated.
Duration: June 1967-May 1969.
Investigator(s): Eugene Shore, Ph.D., Child Psychologist, Department of Psychiatry, Albert Einstein Medical Center, York and Tabor Rds., Philadelphia, Pa. 19141.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-DE-2 LOGICAL OPERATIONS AND CONCEPTS OF CONSERVATION IN PRESCHOOL CHILDREN

Purpose: To test the adequacy of Piaget's theory of concept development to determine the effects of conservation training; to study the relationships between conservation processes and products.
Subjects: Five-year-old nursery school children.
Methods: All children were tested for understanding of basic concepts, i.e., same, more, and less. Children who had acquired these concepts were pretested for understanding of conservation operations and concepts; relationships between operations and concepts were then studied in subjects who did and did not understand concepts and operations of conservation. The latter group received training developed by Roeper and Sigel (1964). Posttests were administered to the training and control groups and results subjected to analysis of variance on repeated measures. Stability of cognitive changes was studied after a three-month interval.
Duration: January 1966-May 1967.
Investigator(s): Irving E. Sigel, Ph.D., Chairman, Department of Research, Merrill-Palmer Institute, 71 E. Ferry Ave., Detroit, Mich. 48202.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-DE-3 THE EFFECT OF VARIOUS TRAINING PROCEDURES ON THE ACQUISITION OF PRENUMBER CONCEPTS

Purpose: To ascertain whether various training procedures can influence the acquisition of the prenumber concept of conservation of substance; specifically, to test the hypothesis that cognitive conflict training procedure will influence the acquisition of the concept of conservation whereas language training, multiple classification training, and verbal rule instruction will not.
Subjects: Equal number of white male and female children from nursery schools, kindergarten classes, and Head Start projects.
Methods: Subjects were randomly assigned to two control conditions and four training conditions, cognitive conflict, language activation, multiple classification, or verbal rule instruction. Measures were taken of performance on verbal and nonverbal conservation tasks one week, one month, two months, and three months after the training period. Data were subjected to chi-square tests of significance.
Duration: 1966-not reported.
Investigator(s): Egon Mermelstein, Ph.D., Assistant Professor of Elementary Education, Hofstra University, Hempstead, N. Y. 11550.
Cooperating group(s): U. S. Office of Economic Opportunity; Office of Education, U. S. Department of Health, Education, and Welfare.

23-DE-4 IMPACT OF LITERACY ON CONCEPTUAL THINKING

Purpose: To conduct a pilot investigation of the effect of written language on categorizing behavior; to test hypothesis that subjects working with verbal materials would utilize abstract-conceptual bases for grouping significantly more often than subjects working with objects or pictures.
Subjects: 30 boys and girls, ages 12 to 15, in middle and lower socioeconomic brackets, attending urban day camp programs.
Methods: Three stimulus arrays were used in a sorting test: a collection of 13 familiar objects, a set of 13 cards showing pictorial representations of these objects, and a set of 13 cards containing brief verbal descriptions of these objects. The array was constructed to provide perceptual, functional, and abstract-conceptual bases for sorting. Subjects were randomly assigned to one of the arrays, and each was required to perform three trials, using a different basis for grouping on each trial.
Findings: Preliminary analysis indicates hypothesis strongly confirmed.
Duration: June 1968-June 1969.
Investigator(s): Sylvia Scribner, M.A., Research Associate, Division of Psychology, Department of Psychiatry, Albert Einstein College of Medicine, Bronx, N. Y. 10461.
Publications: Paper will be submitted to psychological journal.

23-DE-5 THE VALUE OF THE SPOKEN RESPONSE IN DEVELOPING CERTAIN LISTENING SKILLS

Purpose: To assess the value of procedures designed to teach five-year-old children to listen to and use the most common conceptual rules.
Subjects: 120 kindergarten children from a lower class neighborhood randomly assigned to a control group and two experimental groups: (1) an oral responding group; (2) nonoral.
Methods: A program designed to teach the child to use conceptual rules has been prepared for administration to children in groups of four to six. All children in the two experimental groups continuously respond in the program (by identification of pictures), but those in the oral group are taught to speak aloud in addition.
Duration: January 1967-October 1968.
Investigator(s): Evan R. Keislar, Ph.D., Professor, Department of Education, and Carolyn Stern, Ed.D., Director, Research Projects in Early Childhood Learning, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Journal publication planned.

23-DF-1 READINESS OF RURAL AND URBAN CHILDREN TO LEARN CRITICAL THINKING

Purpose: To develop logic testing procedures for children ages six to nine; to determine the level of particular-principle logic mastery of a variety of children in this age range who have not received special instruction in logic; to see whether children of these ages are ready to learn basic principles of logic (if they do not already know them).
Subjects: 600 primary school children selected from various social class and residential backgrounds.
Methods: Two types of tests of basic principles of conditional and class logic, one a paper-and-pencil test, and the other based upon logical relationships existing in certain simple physical situations, will be

developed, compared, and the most valid one selected for final use. Techniques, probably autoinstructional, will be developed for teaching the basic principles of class and conditional logic to primary school students. In 1968-1969, these teaching techniques will be used with 300 selected students, 100 from each of grades one to three. In the Spring of 1969, the selected test will be administered to all 600 students. The instructed students will be compared with the uninstructed, using analyses of covariance. Multiple correlation techniques will be used to develop readiness equations based upon the instructed students.
Duration: July 1967-August 1969.
Investigator(s): Robert H. Ennis, Ph.D., Associate Professor of Education, and Edward Smith, B.S., Research Associate, Department of Education, Cornell University, Ithaca, N. Y. 14850.
Cooperating group(s): Department of Philosophy, Department of Child Development and Family Relationships, and New York State College of Agriculture, Cornell University.

23-DF-2 INFORMATION-PROCESSING IN CHILDREN AS A FUNCTION OF ADULT MODEL, STIMULUS DISPLAY, SCHOOL GRADE, AND SEX

Purpose: To study the influence of the information-processing strategy of an adult model on the subsequent strategy employed by children.
Subjects: 216 children, equally divided between boys and girls, in grades three, five, and seven.
Methods: A 3 x 2 x 3 x 2 x 2 repeated-measures design was used with the following variables: (1) information-processing of model (hypothesis scanning, constraint seeking, or control), (2) stimulus display (pictorial or verbal), (3) school grade, (4) sex, and (5) problems (two per subject). The child first watched an adult model solve a modified 20-question problem in which he attempted to identify the particular designated object of 42 drawings or words. The model employed either a strategy of hypothesis scanning or constraint seeking, while in control conditions the child did not observe the model. Then the child solved two comparable problems himself.
Findings (1) Fewer questions to solution with the constraint-seeking model than the hypothesis-testing model or control, who did not differ; (2) both a higher percentage of constraints, and higher average number of items included per question, for the constraint-seeking model; (3) increasingly better performance by grade; (4) significant model by grade interactions for both percentage of constraints and items per question; and (5) no effects for stimulus display, sex, or successive problems on any measure.
Duration: September 1967-August 1968.
Investigator(s): Patrick R. Laughlin, Ph.D., Associate Professor of Psychology, Loyola University, Chicago, Ill. 60626.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Journal of Educational Psychology, in press, 1968.

23-DG-1 CROSS-CULTURAL COMPARISONS OF THE PERCEPTUAL-COGNITIVE PROCESSES

Purpose: To compare children, adolescents, young adults, mature adults, and older subjects from Brazil, Mexico, and the United States on a variety of perceptual-cognitive tasks.
Subjects: Grammar and high school children (some from the slums), university students, young professionals, and older people.

Methods: A variety of perceptual measures such as autokinesis and the Mooney Test have been administered, as well as the Porteus Maze, the Einstellung Test, Harvey's TIB Scale, the Holtzman Inkblot Test, MMPI, Penney Curiosity Scale, and other specially developed techniques.
Findings: Preliminary results indicate close similarities in some measures such as the autokinetic and the Mooney Test and important differences on measures such as the Holtzman Inkblot Test.
Duration: September 1966-indefinite.
Investigator(s): John F. Santos, Ph.D., Professor and Chairman, and B. J. Farrow, Ph.D., Assistant Professor, Department of Psychology, University of Notre Dame, Notre Dame, Ind. 46556; Aroldo Rodrigues, Ph.D., Director, Psychological Clinic, Catholic University, Rio de Janeiro, Brazil.
Cooperating group(s): Institute for Latin American Population Research, University of Notre Dame; Catholic University, São Paulo, Brazil; National University, Mexico City, Mexico; Agency for International Development, U. S. Department of State.
Publications: One or several monographs planned; interim information available from Dr. Santos.

23-DG-2 INTELLIGENCE AND PERCEPTUAL DEVELOPMENT IN CHILDHOOD

Purpose: To examine the components of measured intelligence in relation to perceptual age changes.
Subjects: Suburban school children in kindergarten through eighth grade.
Methods: Experimental studies of perceptual age changes are conducted, applying appropriate psychophysical methods, and correlated with various cognitive performances.
Duration: May 1965-April 1970.
Investigator(s): Robert H. Pollack, Ph.D., Deputy Director of Research, and Chief, Division of Cognitive Development, Institute for Juvenile Research, 608 S. Dearborn St., Chicago, Ill. 60605.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Psychonomic Science 8:4:141-142, 1967, 5:243-244, 1966, and 4:401-402, 1966; others.

23-DG-3 EFFECTS OF LABELS ON PERCEPTION

Purpose: To investigate several parameters which may influence linguistic modification of perceptual responses; specifically (1) developmental level of the subject; (2) degree of perceived stimulus similarity; (3) type of label employed; (4) type of response task required of the subject.
Subjects: First- and sixth-grade children.
Methods: On the theoretical level, an original model is presented which generates specific predictions concerning the relationships among developmental, stimulus, and linguistic variables. These predictions are tested by an interrelated series of studies. At the methodological level, a new measure for the assessment of perceptual similarity has been developed. This measure provides for a greater opportunity for response differentiation than has been characteristic in earlier studies. Employing this index, similarity relationships among a wide variety of systematically varying nonsense forms are currently being obtained.
Duration: Not reported-December 1968.
Investigator(s): Phyllis A. Katz, Ph.D., Associate Professor of Psychology, College of Arts and Science, New York University, Bronx, N. Y. 10453.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-DG-4 CHILDREN'S PERCEPTIONS OF VERBAL REINFORCEMENTS: DETERMINANTS AND LEARNING OUTCOMES

Purpose: To investigate the influence of personality and stimulus characteristics on children's perceptions of the meaning of verbal reinforcements; to determine individual differences in perceptions and whether those reinforcements which are perceived differently by different children have varying degrees of effectiveness when used in a learning task.
Subjects: 96 nine-year-old boys.
Methods: In the first of three experimental sessions, the child's perceptions of meaning of a variety of verbal reinforcers were elicited in a hypothetical situation played to him on a tape recorder. In the second session, similar reinforcers were used but were related to the child's own performance. In these sessions the subject's perceptions of each reinforcer were elicited. In a third session, a reinforcer from an earlier session was used in a two-choice concept learning task. Personality characteristics such as need for achievement and approval, anxiety, and locus of control were measured by standardized tests.
Findings: In the first two sessions it was found that both content and intonation of verbal reinforcers affected children's perceptions of reinforcers, content being more important. There were some personality differences which influenced the child's perception of reinforcers for some content-intonation conditions.
Duration: February 1967-February 1968.
Investigator(s): Daniel Solomon, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Paper read at Psychonomic Society Meeting, October 1967; data to be published in professional journals.

23-DG-5 PERCEPTION OF DIFFERENTLY ORIENTED SHAPES IN NORMAL AND RETARDED CHILDREN

Purpose: To investigate developmental differences in the perception of differently oriented shapes.
Subjects: Two core groups of children of average intelligence, ages 4 to 6 and 8 to 10; two groups of superior children, equated with core groups on chronologic age; and two groups of retarded children, equated with core groups on mental age.
Methods: Pairs of stimuli in various orientations were presented at two exposure times, and subject was asked to recognize the identical pairs. Data are analyzed to determine degree to which the perception of differently oriented shapes is a function of mental age, chronologic age, and exposure time.
Duration: Not reported-June 1968.
Investigator(s): Ruth F. Deich, Ph.D., Pacific State Hospital, Pomona, Calif. 91769.

23-DG-6 PERCEPTUAL LANGUAGE TEST BATTERY AND SCHOOL ACHIEVEMENT IN DISADVANTAGED CHILDREN

Purpose: To explore the development of the perceptual abilities of culturally disadvantaged children; to discover whether such children, as reported, do show lags in development; and to relate such perceptual lags, if they occur, to school achievement.
Subjects: 134 first grade children in an economically depressed Negro neighborhood, selected as a random sample of those entering first grade.

Methods: Children are tested on a battery of perceptual level tests on entry into first grade and at end of second and third grades. Achievement tests will also be administered at end of second and third grades.
Duration: September 1967-June 1970.
Investigator(s): Paul S. Weiner, Ph.D., Assistant Professor of Psychology, and Joseph M. Wepman, Ph.D., Professor of Psychology, University of Chicago, Chicago, Ill. 60637.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Journal publication planned.

23-DH-1 RECEPTIVE-EXPRESSIVE VOCABULARY AND SOCIAL STATUS POSITION

Purpose: To relate differences in receptive-expressive vocabulary as a function of socioeconomic background.
Subjects: Over 200 children representing various backgrounds from schools in Atlanta.
Methods: The Peabody Picture Vocabulary Test is administered under the usual conditions (Form A) (recognition-reception), and the same stimulus words (Form B) are used to have the child explain what they mean (expression).
Findings: Negro children show a greater discrepancy in expression than white children, with minimal differences in reception.
Duration: January 1967-December 1968.
Investigator(s): Luciano L'Abate, Ph.D., Professor of Psychology, Georgia State College, Atlanta, Ga. 30303.
Publications: Paper read at Council of Exceptional Children Meeting, 1968.

23-DH-2 LANGUAGE DEVELOPMENT IN YOUNG CHILDREN

Purpose: To better understand the development of those phases of children's language which are systematically and directly reflective of less overt thought processes; to develop and refine testing and data analysis methods which allow for less structure in stimuli items or response formats, to make possible the obtaining of data from the young children, with minimum loss of reliability and validity.
Methods: Conceptual models are developed and tested, and language data collected, scored, and analyzed.
Duration: Not reported-August 1968.
Investigator(s): Jeremy D. Finn, Ph.D., Department of Educational Psychology, State University of New York, Buffalo, N. Y. 14214.

23-DH-3 A PRELIMINARY STUDY OF THE STRUCTURE OF ENGLISH USED BY NEGRO AND PUERTO RICAN SPEAKERS IN NEW YORK CITY

Purpose: To determine the socially significant variables in English structure which distinguish Negro and Puerto Rican speakers from the rest of the New York City speech community, and to define those conflicts of the Negro and Puerto Rican vernaculars which interfere with the acquisition of reading skills.
Subjects: Negro and Puerto Rican youth.
Methods: Trained interviewers and analysts measured the relevant linguistic variables, taking into account structural and functional

conflicts, the two types of underlying causes in failure to acquire the use of standard English. They then isolated the chief linguistic variables responsible for structural conflict.
Findings: Tentative conclusions were: final consonants, when followed by silence, are often not realized in these dialects; most teachers do not have the information that would allow them to distinguish between mistakes in reading and nonstandard forms of pronunciation; the standard tests of the child's ability to distinguish speech sounds are not adequate for the urban areas described; and the most general rule which is different in the language of nonstandard and standard speakers should be isolated and taught if it is relevant to the process of reading.
Duration: Not reported.
Investigator(s): William Labov, Paul Cohen, and Clarence Robins, Department of Linguistics, Columbia University, New York, N. Y. 10027.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-DH-4 FACTORS OF VISUAL PERCEPTION IN LANGUAGE LEARNING PROBLEMS

Purpose: To develop items for measuring selected dimensions of visual perception--closure and figure-ground discrimination; to contribute to the improvement of known methods or the development of new procedures to be used in the education of children with language learning problems.
Subjects: Children, ages three to six, in preschool or regular school programs.
Methods: Children are examined on standard tests which depend upon the visual avenue for eliciting responses, and on measurements of visual closure, figure-ground discrimination, and perceptual speed, adapted and designed specifically for this study. A correlation matrix will be constructed to consider relationships among responses to the various test situations. Children's test behavior will be analyzed and related to language learning.
Duration: September 1966-September 1969.
Investigator(s): Nancy E. Wood, Ph.D., Professor, Graduate Program in Communicative Disorders, and Director of Language Pathology, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned in professional journals.

23-DH-5 FACTORS OF AUDITORY PERCEPTION IN LANGUAGE LEARNING PROBLEMS

Purpose: To develop methods for measuring selected dimensions of auditory perception--closure, figure-ground discrimination, and duration; to contribute to the improvement of known methods or the development of new procedures to be used in the habilitation of children with language learning problems.
Subjects: Children, ages three to seven, in preschool or regular school programs.
Methods: Children are divided into two groups, one with language learning problems, and the other with adequate language development for speech. Both groups are examined on standard tests which depend upon the auditory avenue for eliciting responses, and on measurements of auditory closure, figure-ground discrimination, and perceptual speed, adapted and designed specifically for this project. Within-group and between-group variations will be assessed and a correlation matrix constructed to consider relationships among responses to the various test situations.

Duration: September 1967-August 1970.
Investigator(s): Nancy E. Wood, Ph.D., Professor, Graduate Program in Communicative Disorders, and Director of Language Pathology, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned in professional journals.

23-DH-6 LANGUAGE RETARDATION UNIT OF THE COMMUNICATION SKILLS CENTER PROJECT

Purpose: To develop methods and insight into the communication abilities, or lack thereof, of severely language-retarded preschool children; to provide information by investigating the causes, nature, and new treatments of language disorders.
Subjects: Children, ages two-and-one-half to four-and-one-half, who appear to be organically sound and intellectually average or better, but who cannot or do not communicate.
Methods: Children are seen individually or in groups of two to five for brief periods of intensive instruction separated by other kinds of activity, such as language-oriented play therapy. Teachers use a variety of teaching techniques specifically geared toward language development and another group of techniques designed to meet children's needs for nonverbal training. Instructional materials used include toys, dolls, puppets, games, raised figures, records, tape recorders, large mirrors, a play village, stories, books, blackboards, bulletin boards, and flannel boards.
Findings: Of the 20 children originally in the project, seven are attending regular school classes while continuing treatment in the unit. Their fulltime release from the unit is anticipated in the near future.
Duration: March 1966-June 1969.
Investigator(s): Theodore Mandell, Ed.D., Supervisor, Speech Correction Classes and Hearing Conservation, and Frances Eldis, M.A., Clinician, Speech and Hearing Clinic, Detroit Public Schools, 5057 Woodward, Detroit, Mich. 48202.
Publications: Report and evaluation available from Dr. Mandell after September 1969.

23-DH-7 INCREASING VERBAL COMMUNICATION SKILLS IN CULTURALLY DISADVANTAGED PRESCHOOL CHILDREN

Purpose: To develop measures of verbal communication skills, assess effectiveness of a training program based on operant approach, and develop a technique for teaching training program to lay volunteers.
Subjects: 30 children, ages three to five, enrolled in local Head Start program.
Methods: All subjects are pretested on specially devised test of verbal communication skill and experimental and control groups established on basis of age, sex, and pretest score. Experimental group undergoes a 30-session training procedure in which small subgroups of five children each will be systematically rewarded with food, trinkets, praise, and approval, contingent on their verbal productions of gradually increasing complexity. Training sessions are 15 minutes, once a day, five days per week for six weeks. All subjects are retested at conclusion of training.
Findings: Communication skills can be reliably tested.
Duration: June 1968-June 1969.
Investigator(s): Alan O. Ross, Ph.D., Professor of Psychology, State University of New York, Stony Brook, N. Y. 11790.

Cooperating group(s): Economic Opportunity Council of Suffolk, Inc., Patchogue, N. Y.; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned in relevant professional journals.

23-DH-8 STUDIES OF LINGUISTIC CONTROL IN CHILDHOOD

Purpose: To chart knowledge of grammatical structure and the development of communication skills in the early school years.
Subjects: Middle class and underprivileged children in the Boston area.
Methods: Communication skills are studied in a minimal communication situation in which an encoder names items in an array so that a decoder can identify them. Methods include imitation and evidence of sentence comprehension.
Findings: Communication skills are not readily improved by simpler forms of feedback knowledge of decoder's choices.
Duration: June 1967-May 1972.
Investigator(s): Roger Brown, Ph.D., Professor of Social Psychology, Department of Social Relations, Harvard University, Cambridge, Mass. 02138.

Personality

23-EA-1 DELAY OF REINFORCEMENT AND CHILDREN'S BEHAVIOR

Purpose: To gain a comprehensive understanding of children's behavior in relation to delay of reinforcement.
Subjects: Children, ages 1 to 14.
Methods: A variety of methods are being used in 18 systematic and interrelated experiments.
Findings: In a simple instrumental situation (lever pulling), delay of reinforcement is associated with greater persistence in responding than is immediate reinforcement.
Duration: March 1967-June 1969.
Investigator(s): F. Michael Rabinowitz, Ph.D., Assistant Professor of Psychology, University of Washington, Seattle, Wash. 98105.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Psychological Reports 22:639-646, 1968.

23-EA-2 AUTHORITY, RULES, AND AGGRESSION--A CROSS-NATIONAL STUDY OF SOCIALIZATION INTO COMPLIANCE SYSTEMS

Purpose: To study the socialization of behavior involved in the control-aggression-compliance relationship between children and authority figures; to examine relationships between aggression toward peers and aggression toward adult authority in terms of social, cultural, and psychological variables.
Subjects: Children in grades four, six, and eight from cities in the United States, Italy, Greece, Denmark, India, and Japan.

Methods: Researchers drawn from middle and working class socioeconomic levels will gather data through questionnaires, semistructured projective techniques, interviews, sociometric peer nomination techniques, and teachers' ratings. Data will be analyzed to determine relationship among social, cultural, and psychological variables and the extent to which aggressive behavior and compliance toward peers and adult authority are determinable and predictable from variables built into the study design.
Duration: Not reported.
Investigator(s): Robert D. Hess, Ph.D., Lee Jacks Professor of Child Education, School of Education, Stanford University, Stanford, Calif. 94305.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-EA-3 THE RELATIONSHIP BETWEEN ADULT NURTURANCE AND DEPENDENCY AND PERFORMANCE OF THE PRESCHOOL CHILD

Purpose: To test hypotheses that (1) performance of preschool children on a complex task is more efficient under nurturant conditions than under nurturance-deprivation conditions, and (2) under nurturance-deprivation, children high in dependency will perform less efficiently than children low in dependency.
Subjects: 24 four-year-olds, 12 of each sex, in a preschool program.
Methods: Beller's 7-point behavior rating scale used to identify high and low dependency; nurturant and nurturance-deprivation manipulated by behavior of experimenter in a puzzle test.
Findings: Both hypotheses were confirmed. No significant sex differences.
Duration: Spring 1967-Spring 1968.
Investigator(s): W. Edgar Vinacke, Ph.D., Professor of Psychology, and Russell DiBartolo, Ph.D. Candidate, State University of New York, Buffalo, N. Y. 14214.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Accepted for publication in Developmental Psychology.

23-EB-1 MASCULINITY AND FEMININITY IN THE ELEMENTARY AND JUNIOR HIGH SCHOOL YEARS

Purpose: To determine the nature and development of masculinity and femininity in the elementary and junior high school years; to explore the relationship between appropriateness of sex identity and academic achievement.
Subjects: Two classes of middle class boys and girls at each grade one through eight, and their teachers.
Methods: Each child took Cattell's Early School Personality Questionnaire, Children's Personality Questionnaire, or Junior-Senior High School Personality Questionnaire and made self- and peer ratings on a four-point scale of masculinity or femininity, depending upon sex. Each teacher made judgments of masculinity of the boys in her class and femininity of the girls by pair comparisons. Stanford Achievement Test scores and Lorge-Thorndike I.Q.'s were obtained from each child's school record. Multiple regression analyses, using masculinity and femininity scores and the personality test scores, will be done to determine the nature and development of masculinity and femininity. Correlations between ratings of masculinity and femininity, and I.Q./academic achievement ratios will be obtained.

Duration: May 1967-May 1968.
Investigator(s): Karen Vroegh, M.A., Research Associate, Noel Jenkin, Ph.D., Director of Research, and Millicent Handrich, B.A., Junior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: To be published in one or more professional journals.

23-EB-2 EFFECT ON EGO FORMATION OF CONGENITAL SENSORY DEFICITS

Purpose: To investigate the processes of ego formation with the assumption that sensory deprivation of various modalities will throw into relief adaptive processes which, in the normally equipped infant, are necessarily obscured.
Subjects: Congenitally blind and congenitally hard-of-hearing children as well as children who have suffered significant extended periods of maternal deprivation.
Methods: Approximately monthly extended observations of each child are carried out in the home environment and are accompanied by interviews and discussions with parents and other members of the household. Where they seem relevant, laboratory and psychological tests are used to supplement observations. In particular, the development of the object concept has been followed.
Findings: Hard-of-hearing and deaf children do not appear to have the same susceptibility to autistic-like reactions as characterize the congenitally blind. Maternal deprivation any time during the first two years of life appears to be associated with significant growth retardation. The nature of affective disturbances, however, varies considerably as a function of the time deprivation began.
Duration: March 1967-February 1970.
Investigator(s): David A. Freedman, M.D., Associate Professor of Psychiatry and Neurology, Baylor University College of Medicine, Houston, Tex. 77025.
Cooperating group(s): Texas Children's Hospital; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Papers accepted for publication in Psychoanalytic Quarterly and Psychosomatics.

23-EB-3 RESISTANCE TO EXTINCTION AS A FUNCTION OF SCHEDULE OF REINFORCEMENT, PERCEIVED LOCUS OF REINFORCEMENT, AND SEX OF CHILD

Purpose: To relate persistence after instrumental conditioning to reinforcement schedule and to whether the child believes he is rewarded because of his skill or because of his luck. J. B. Rotter found that resistance to extinction in adults varies according to such independent variables.
Subjects: 64 male and female Negro children enrolled in a Head Start program.
Methods: Children received 40 acquisition trials and 20 extinction trials and were then asked to press consecutively five telegraph keys on a stimulus display panel. The three variables of schedule reinforcement (50 percent vs. 100 percent), instructions (luck vs. skill), and sex were combined in a factorial design. Dependent variable was response speed, and data were analyzed in terms of starting, running, and finishing speeds.
Findings: Consistent with Rotter's research, an interaction effect was obtained between schedule of reinforcement and instructions. Under luck

instructions, the usual partial reinforcement effect was obtained, but under skill instructions, an inverse partial reinforcement effect occurred. Starting speed measures showed faster speeds for females than males during extinction.
Duration: August 1967-January 1969.
Investigator(s): John R. Stabler, Ph.D., Associate Professor, and Robert Baker, Research Assistant, Department of Psychology, Louisiana State University, Baton Rouge, La. 70803.
Cooperating group(s): Louisiana State University Computer Center; U. S. Office of Economic Opportunity.
Publications: Publication planned in psychological journal.

23-EC-1 LEARNING OF INCENTIVE VALUE IN CHILDREN

Purpose: To determine some of the principles whereby neutral objects come to be reacted to as pleasant or unpleasant, and to determine the effects of both acquired pleasantness and unpleasantness on numerous forms of behavior, including verbal evaluation, expectancy of reward, choice behavior, curiosity, and various aspects of selective attention.
Subjects: Hundreds of normal children, ages 7 to 12.
Methods: Nonsense syllables are used as cues in discrimination learning. Some syllables are related to obtaining rewards (e.g., money or candy), others are related to some type of punishment (e.g., loss of money), and others signal neutral events. Children are taken to a stringent criterion of 100 percent learning of the discriminations. One or more days later dependent measures are applied. Parameters of learning, such as amount of reward, circumstances under which rewards are received, schedules of reward, and others, are manipulated.
Findings: Association of neutral objects with rewards has the predicted effects on many of the dependent measures. Also, results are affected in a regular manner by various treatment parameters.
Duration: September 1967-August 1970.
Investigator(s): Jum C. Nunnally, Ph.D., Professor and Chairman, Department of Psychology, Vanderbilt University, Nashville, Tenn. 37203.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Child Development 39:159-166, 1968; others.

23-EC-2 RESEARCH ON THE PROCESSES OF INTERNALIZATION OF RULES, STANDARDS, AND VALUES

Purpose: To investigate the correspondence between fantasy measures of moral behavior and actual behavior in a temptation test, the influence of mother-child interaction on cheating behavior, and the relationships between achievement, delay of gratification, and cheating.
Subjects: 80 to 150 children, ages four to six.
Methods: Story completion tests were used before and after the child was tested for cheating in an experimental situation, and responses were scored to indicate guilt feelings. Resistance to temptation was measured by observing the child's conformity to the rules of a simple bean bag game, both with and without his mother's presence. Observations were made through a one-way mirror.
Duration: Continuing.
Investigator(s): Roger V. Burton, Ph.D., Research Psychologist, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-EF-1 DEPRESSIVE PHENOMENA IN CHILDHOOD

Purpose: To clarify the nature of depression in childhood and its relationship to adult depression.
Subjects: Initially, 30 in- and outpatients of Children's Hospital.
Methods: Currently being developed.
Duration: July 1968-June 1973.
Investigator(s): Leon Cytryn, M.D., Research Associate, Children's Hospital, Washington, D. C. 20009.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Social

23-FA-1 ASSESSMENT OF RELATIONSHIPS THROUGH MESSAGE PREFERENCES

Purpose: To test hypothesis that children evaluate interpersonal messages differently depending upon the person to whom the message is attributed; to determine the dimensions which underlie the acceptability of interpersonal messages to children and whether these dimensions are the same for different relationships.
Subjects: Approximately 350 boys, ages 8 to 13, members of two Boys Clubs.
Methods: Each subject evaluated the desirability of 63 interpersonal messages (e.g., "I am stronger than you are"; "You don't really need me") via a nonforced Q-sort, with instructions to assume that the messages were from mother, best friend, Boys Club staff member, or policeman. Hypothetical message sources were assigned at random. After evaluating the standard messages, each subject was asked to construct the message he would most like to receive from the assigned source, to record this message, and to choose between hearing it replayed or receiving an M&M candy on each of 15 trials. The 63 messages were factor analyzed for each relationship, and the four relationships were compared for factor structure and rated desirability of various types of message.
Findings: Preliminary analysis indicates significant differences between groups for the four relationships on about 20 percent of the individual messages.
Duration: January 1967-January 1968.
Investigator(s): Malcolm M. Helper, Ph.D., Associate Professor of Medical Psychology, University of Nebraska College of Medicine, Omaha, Neb. 68105.
Publications: Journal publication planned, probably after replication.

23-FA-2 LEARNING CONSIDERATION FOR OTHERS: THE INFLUENCE OF MODELING AND REINFORCEMENT

Purpose: To determine the extent to which one can influence the development of consideration for others in preschool children.
Methods: Pictures and contrived "real" situations of mild distress were used to test children's response to distress. Children were then randomly assigned to one of four experimental groups or a control group. Those in Groups A and B received higher nurturant treatment from the experimenter during play sessions on four consecutive days; children in Groups C and D received relatively little nurturance. Groups B and D then received four days of training consisting of adult modeling of considerate actions. Posttests paralleling the baseline tests given prior to the experiment were administered to all groups on the day after the training of Groups B

and D; a second set of behavioral posttests was administered two weeks later.
Findings: More learning resulted from a high nurturant relationship with the model than from a low nurturant one.
Duration: Not reported-1968.
Investigator(s): Marian Radke Yarrow, Ph.D., Chief, and Phyllis M. Scott, Ph.D., Visiting Associate, Section on Developmental Psychology, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-FA-3 A DEVELOPMENTAL STUDY OF BALANCE AS AN ORGANIZING PRINCIPLE OF INTERPERSONAL PERCEPTION

Purpose: To investigate the validity of Heider's balance principle of interpersonal perception among adolescent and preadolescent age groups; to determine age differences in tendencies to balance.
Subjects: 261 males and females, ages 10 to 19, in grades 5, 8, and 11, and second-year college students.
Methods: Subjects are shown the verbal story form of the Heider-Simmel (1944) film, involving a triadic interpersonal situation. They are then asked to give a written description of the story plot and to rate the three story characters for their personal attributes, attitudes toward one another, and affiliative relationships.
Findings: Heider's balance principle was confirmed at all age levels; there were no age differences in tendencies toward balance.
Duration: 1965-January 1968.
Investigator(s): Arthur Alan Shaw, Ph.D., Clinical Psychologist, Veterans Administration Center, Wadsworth, Kan. 66089.
Publications: Doctoral dissertation available through Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. 48103.

23-FA-4 INTELLIGENCE AND CREATIVITY: THEIR EFFECT ON PEER ACCEPTANCE

Purpose: To investigate the effects of intelligence and creativity on peer acceptance.
Subjects: Stratified random sample of 400 Idaho Falls elementary school children, grades two through six.
Methods: Peer acceptance ratings in social and academic situations are being analyzed. Two separate 5 x 2 x 2 x 2 x 10 analyses of variance are being carried out.
Findings: Preliminary results suggest distinct relationships and significant interactions between intelligence and creativity and peer acceptance.
Duration: January-October 1968.
Investigator(s): John F. Jacobs, M.Ed., Assistant Professor, Utah State University, Logan, Utah 84321.
Cooperating group(s): University of Florida, Gainesville.
Publications: Probably will be presented to Council on Exceptional Children.

23-FA-5 FACTORS AFFECTING OBSERVATIONAL LEARNING IN PRESCHOOL CHILDREN

Purpose: To study the influence of the adult-child relationship upon the effectiveness of the adult as a model for children's imitative responses; to investigate the components of imitative responses as a function of the child's relationships with an adult; to obtain data on the child's "internal model" or representation of what he has reproduced from observation of the adult.
Subjects: Nursery school children.
Methods: Children assigned to experimental play groups; experimenter played a high nurturant or supportive role in half the groups and a less nurturant or unresponsive role in the other half. Experimenters performed a number of novel acts without specific directions to the children, and observational records were made of the children's imitative responses. Analyses and further experimentation explore factors which influence the child's responses and which account for his motivation to reproduce the adult's acts.
Duration: Not reported-1968.
Investigator(s): Marian Radke Yarrow, Ph.D., Chief, and Phyllis M. Scott, Ph.D., Visiting Associate, Section on Developmental Psychology, Laboratory of Socio-environmental Studies, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-FA-6 STUDIES IN ALTRUISTIC BEHAVIOR

Purpose: To examine the antecedents and correlates of concern for others in children.
Subjects: Children in kindergarten through grade 6.
Methods: Children are exposed to an altruistic model in a charity-giving context, and their behavior on the model's departure is assessed in relation to antecedent and concomitant conditions.
Findings: Observation of a model facilitates altruism in children. Altruism is age-contingent. Teachers' ratings of obedience and helpfulness correlate with experimental behaviors.
Duration: March 1968-August 1972.
Investigator(s): David L. Rosenhan, Ph.D., Professor of Psychology, Swarthmore College, Swarthmore, Pa. 19081.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: In New Directions in Developmental Psychology, P. H. Mussen (Ed.). New York: Holt, Rinehart & Winston, in press, 1968; Journal of Personality and Social Psychology, 1967.

23-FA-7 CHILDREN'S PLAY AS AN INDEX OF DEGREE OF SOCIALIZATION

Purpose: To compare the developmental pattern in play demands for social interaction in various cultures and subcultures.
Subjects: Children, ages 5 to 11.
Methods: A scale and report form, extrapolating from Sullivan's theory of interpersonal development, were developed and standardized separately for boys and girls in suburban middle class Santa Monica, Indianapolis, and Boston. Comparable urban and rural samples were gathered in Oslo, London, Madrid, Athens, and Cairo to test democratic-authoritarian cultures. Comparable samples of handicapped, gifted, and disadvantaged children are being gathered to shed light on their social problems.

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Findings: Marked sex, age, rural-urban, and national differences in terminal level in America and Japan.
Duration: 1967-1969.
Investigator(s): May V. Seagoe, Ph.D., Professor of Education, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): Chancellor's Ford Comparative Education Project.

23-FE-1 QUESTIONING AND ANSWERING BEHAVIOR OF PRIMARY AND SECONDARY SCHOOL CHILDREN

Purpose: To expose socially based variations of curiosity, its verbal expression, and the perceived adequacy of different answers, and to specify the social psychological antecedents of differences in these areas.
Subjects: Random samples of 5-, 10-, and 15-year-old children; specially selected subsamples to allow a specification of sex, social class, and I.Q. differences.
Methods: Controlled observations of parent-child and teacher-child interaction, questionnaires, experimental situations.
Duration: 1967-1971.
Investigator(s): W. P. Robinson, D. Phil., Lecturer, Department of Psychology, The University, Southampton, England.
Cooperating group(s): Joseph Rowntree Memorial Trust; Schools Council; Ford Foundation.
Publications: Answers to Questions, W. P. Robinson and S. J. Rackstraw. London: Routledge and Kegan Paul, Ltd., 1969; Language and Speech 10, 1967; Sociology 1, 1967.

SPECIAL GROUPS OF CHILDREN

Physically Handicapped

23-GA-1 ENVIRONMENTAL AND HEREDITARY INFLUENCES IN THE ETIOLOGY OF CONGENITAL MALFORMATIONS IN SOUTH WALES

Purpose: To study environmental and genetic influences of etiological importance in the congenital malformations of a birth population in South Wales; to provide material for cohort studies of representative samples of normal and defective children in relation to their social and educational needs.
Methods: Identification of all congenital malformations in the birth population of South Wales over a four-year period; examination of incidence of specific malformations in relation to district and season, and to ethnic group, age, reproductive history, and socioeconomic status of parents.
Duration: 1963-1966.
Investigator(s): C. R. Lowe, M.D., D.P.H., Professor, and I. D. G. Richards, M.D., Lecturer in Social Medicine, Department of Social and Occupational Medicine, Welsh National School of Medicine, The Parade, Cardiff, Wales.
Cooperating group(s): Association for the Aid of Crippled Children.

23-GA-2 REVIEW AND ANALYSIS OF PROGRAMS AND SERVICES FOR CHILDREN AND YOUNG ADULTS WITH HEART DISEASE IN MICHIGAN

Purpose: To provide information that will be useful in planning and implementing improved heart disease control programs in Michigan.
Subjects: All resources and facilities in Michigan that provide care for children and young adults with heart disease.
Methods: A preliminary study of services will be made by consulting reports of the Division of Services for Handicapped Children and other sources of hospital data on utilization of medical services. Once services have been identified, they will be visited. As part of the inventory of services, local health officers will be visited in the five regional areas served by the Michigan Heart Association. In addition, a random selection of hospitals not observed in person will be asked to respond to a questionnaire.
Duration: August 1967-June 1969.
Investigator(s): Donald C. Smith, M.D., D.P.H., Professor of Maternal and Child Health, Department of Health Development, University of Michigan School of Public Health, Ann Arbor, Mich. 48104.
Cooperating group(s): Michigan Department of Public Health; Michigan Heart Association.
Publications: Results and recommendations will be published in an appropriate scientific journal.

23-GA-3 EPIDEMIOLOGY OF HEAD INJURIES IN CHILDREN: A PROSPECTIVE STUDY

Purpose: To study the natural history of head injuries in children resulting from accidents, and to understand the phenomenon of traumatic head injuries by documenting and establishing relationships between the host, environment, and agent.
Subjects: Children, ages 3 to 15, visiting the Emergency Department of Vancouver General Hospital for investigation of head injuries; control subject matched to each injured child for age within three months, sex, I.Q., geographic location, socioeconomic status, and school class.
Methods: The study takes into account the following classes of variables: (1) demographic information on family and child; (2) intelligence and social maturity of child; (3) previous history of disabling conditions; (4) detailed information on the accident, the site, cause, etc.; (5) medical findings, including state of consciousness; (6) severity of head injury; (7) other injuries sustained; (8) diagnostic procedures and treatment, including radiographs; (9) disposition; (10) reactions of parents and child to the head injury; (11) history of previous head injuries or other accidents; (12) followup to determine sequelae.
Duration: April 1968-1970.
Investigator(s): H. Klonoff, Ph.D., Associate Professor and Head, Section of Psychology, Department of Psychiatry, and G. C. Robinson, M.D., Associate Professor, Department of Pediatrics, University of British Columbia; H. S. Miller, M.D., Director, Emergency Department, Vancouver General Hospital; and G. A. Mott, M.D., D.P.H., Deputy Medical Health Officer, Vancouver Health Department, Vancouver, B.C., Canada.
Cooperating group(s): Vancouver School Board; Metropolitan Health, Vancouver Federal Health Grants, Ottawa, Canada.
Publications: Canadian Medical Association Journal 96:1308-1311, May 13, 1967.

23-GB-1 AN ECONOMICAL TEST FOR SCREENING CHILDREN AND ADULTS WITH OVERT AND COVERT CEREBRAL DYSFUNCTIONS SECONDARY TO BRAIN LESIONS

Purpose: To develop an instrument to detect and define brain lesions where the evidence of such lesions is covert as well as overt.
Subjects: 4,000 children, ages 8 to 17: 3,680 in classes for normal children, and the rest in special classes for the educable mentally retarded, brain damaged, and emotionally disturbed.
Methods: A Symbol-Digit Modalities Test (substitution of numbers for geometric figures) was developed and standardized in written and oral responses by all subjects. Data were analyzed and norms prepared. The SDMT was routinely included in neuropsychological test batteries administered to over 1,000 children and adults with suspected and verified brain lesions.
Findings: Norms showed significant differences in normal children according to age and sex. The Symbol-Digit Modalities Test appears to be an exceedingly sensitive and effective, as well as an economical tool both for screening cases with covert and unsuspected early brain damage, and for defining the nature of defects, especially when used in conjunction with other neuropsychological tests.
Duration: 1964-1970.
Investigator(s): Aaron Smith, Ph.D., Associate Professor, Speech Clinic, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Omaha, Neb. Public Schools; Omaha Veterans Administration Hospital; Department of Neurology, University of Michigan.
Publications: Educational and Psychological Measurement, December 1967; Learning Disorders, 1967; the SDMT is scheduled for publication and distribution by Western Psychological Services.

23-GB-2 BEHAVIORAL CLASSIFICATION FOR THE HANDICAPPED

Purpose: To develop data previously collected in order to test statistically an objective classified system based on previous and present study. The present investigation is based on recently defined rating scale batteries, the Central Wisconsin Colony Scales of Adaptive Behavior, which employ a number of fine scale units to discriminate the behavior of the children.

Methods: Used multidimensional scaling and factor analytic studies after the methods of Kaiser and Torgerson to develop factor scores and profiles for classification purposes.

Findings: Factor rotations and computer runs on CDS 1604 have been completed. Data are now being processed.

Duration: June 1967-August 1968.

Investigator(s): Earl E. Balthazar, Ph.D., Research Scientist and Chief, Research Department, Central Wisconsin Colony and Training School, 317 Knutson Dr., Madison, Wis. 53704.

Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Publications: Plan to publish in an appropriate journal; information available on preliminary studies.

23-GB-3 COMPUTERIZED OBJECTIVE AUDITORY TESTING IN INFANCY

Purpose: To evaluate the use of an average response computer in testing infants suspected of deafness prior to the time when standard audiometric test methods are applicable.

Subjects: Infants from a high risk group where deafness is suspected, most of whom are under age two, with a majority under age one; control group of 10 normal infants.

Methods: Subjects are tested through vertex recordings with tone bursts of 500 Hz and 2,000 Hz delivered at five-second intervals. Initial intensity level is 50 dB H. L. with on-line computing determining subsequent levels. Subjects will be followed regularly until an accurate determination of hearing can be confirmed by routine means.

Duration: July 1966-June 1969.

Investigator(s): Victor Goodhill, M.D., Professor of Surgery in Residence, Center of Health Sciences, University of California, Los Angeles, Calif. 90024.

Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-GC-1 CORRELATES OF BIRTH ORDER IN NORMAL AND ASTHMATIC CHILDREN

Purpose: To assess effects of birth order on respiratory and cardiac response to stress in normal and asthmatic males; to study the relationship between birth order and report of the role of emotion in asthma; to assess the relationship between birth order and effect of institutionalization on symptom status of asthmatic children.

Subjects: 14 first-born and 15 later-born males, ages 12 to 15; 5 first-born and 14 later-born asthmatic males, ages 12 to 15; 36 female and 31 male asthmatics; 258 asthmatics.

Methods: Measurement of cardiac and respiratory response under conditions of rest, tones, shock, mental arithmetic, and mental arithmetic and criticism; a structured "precipitants" interview in which the child reports, in order of importance, the precipitants that gave him asthma at home; assessment of change in symptom status following institutionalization at Children's Asthma Research Institute and Hospital.

Findings: No respiratory differences were found between birth order groups of normal males under any conditions, but the first-born were found to have significantly higher heart rates under all conditions. Tentative findings on the asthmatic boys indicate no heart rate differences under any conditions, but the first-born had higher respiratory rates under all conditions. First-borns reported emotions to be more important precipitants of their asthma. First-borns are over-represented in the group at CARIH that shows dramatic improvement.
Duration: Summer 1966-not reported.
Investigator(s): Jonathan H. Weiss, Ph.D., Chief, Clinical Psychology, Children's Asthma Research Institute and Hospital, Denver, Colo. 80204.
Cooperating group(s): Sigma Xi.
Publications: Paper to be submitted to Journal of Personality and Social Psychology; paper presented at American Psychological Association Meeting, Washington, D. C., 1967.

23-GC-2 BEHAVIORAL STUDY OF CHILDREN WITH CONGENITAL RUBELLA

Purpose: To determine the special behavioral and intellectual consequences of congenital rubella; to use these findings to enhance the effectiveness of the treatment and education of children with this condition; to generalize findings for use of professional workers concerned with children with congenital rubella or those with multiple handicaps resulting from other causes.
Subjects: Three-year-old children: 246 with congenital rubella; 90 without obvious congenital defects whose mothers also had rubella during pregnancy; group of normal children.
Methods: Subjects undergo behavioral, psychiatric, and developmental evaluations. Findings of the first two groups will be compared with one another and with findings from the group of normal children.
Duration: 1967-continuing.
Investigator(s): Stella Chess, M.D., Associate Professor, John F. Donohue, M.D., Attending Psychiatrist, Becky Adelson, D.S.W., Supervisor of Psychiatric Social Service, and Paulina Fernandez, Ph.D., Psychologist, Department of Psychiatry, New York University Medical Center, New York, N. Y. 10016.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-GC-3 DISEASE AND EDUCATION IN ST. LUCIA

Purpose: To evaluate the influence of Bilharzia on the scholastic performance of St. Lucian (West Indies) school children.
Subjects: Children attending Standard VI and Form II and comprising those age levels with the highest prevalence of Bilharzia.
Methods: Children were tested for reading comprehension and vocabulary, and data were derived on basic ethnographic information. A 10 percent systematic sample was selected to supply stools on which tests for Bilharzia and other nonamoebic parasitic diseases were performed.
Duration: 1968-1970.
Investigator(s): Erwin H. Epstein, Ph.D., Assistant Professor, Department of Educational Policy Studies, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Rockefeller Foundation.
Publications: Indefinite.

23-GC-4 SPEECH READING FAILURE IN DEAF CHILDREN

Purpose: To investigate the psychological and neurological processes which result in the failure of the multiply handicapped child to develop speech reading skills; to study the relationship of aphasia for speech reading to the development of other language processes; to develop remedial techniques for children with this type of disability.
Subjects: 60 deaf children, ages four to nine; experimental group consisted of children in a training program who have been unable to develop speech reading and language skills expected for their ages.
Methods: Subjects were given a battery of psychological tests providing diagnostic data on those children who were unable to develop competency in speech reading, and data concerning the various reasons for failure to develop the skills. Remedial techniques were attempted with the experimental group.
Duration: December 1966-August 1968.
Investigator(s): Arthur I. Neyhus, Ph.D., Associate Professor, Institute for Language Disorders, Northwestern University, Evanston, Ill. 60201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-GC-5 SOCIAL-PSYCHOLOGICAL IMPLICATIONS OF DISCREDITABLE STIGMATA

Purpose: To examine the self-other orientation of children with Turner's syndrome.
Subjects: 10 girls with Turner's syndrome; 45 controls.
Methods: Subjects were tested with Ziller's Self-Other Orientation Tasks, a topological method of measuring self-esteem, social interest, and complexity of the self-concept.
Findings: Turner's syndrome is associated with lower self-esteem and social interest.
Duration: Not reported.
Investigator(s): Lynn H. Golding, M.A., Research Assistant, and Robert C. Ziller, Ph.D., Professor of Psychology, University of Oregon, Eugene, Ore. 97403.
Cooperating group(s): National Science Foundation.
Publications: Submitted to Journal of Abnormal Psychology.

23-GD-1 CAUSES OF VISUAL IMPAIRMENT OF PRESCHOOL AGE CHILDREN

Purpose: A study conducted in 1950 indicated that retrolental fibroplasia was responsible for blindness in approximately 50 percent of all blind preschool children. Today, RLF has been practically eliminated as a cause of blindness in infants. This study attempts to investigate the present causes of blindness and vision impairment among infants and preschool children; specifically, to determine (1) what other major changes have occurred since 1950, (2) whether there are other causes of blindness or severe vision impairment that now present a significant threat to young children, (3) whether there are significant changes in the incidence of blindness among this group, and (4) the incidence and causes of less severe vision impairments than blindness.
Subjects: All children born between January 1, 1959 and December 31, 1966, and known to agencies providing services to preschool children who are visually impaired (legally blind or partially seeing).
Methods: Attempts are being made to secure case records of all subjects. State agencies maintaining a register of these children and/or providing

services are requested to provide the National Society for the Prevention of Blindness with case records, including an eye examination report and data pertaining to age, sex, remaining visual acuity, and cause of impairment. Where this information is not available from state agencies, local agencies will be contacted. Data will be coded according to standard procedures and summarized for analysis.
Duration: September 1967-December 1968.
Investigator(s): Elizabeth M. Hatfield, M.P.H., Consultant in Statistics, National Society for the Prevention of Blindness, Inc., 79 Madison Ave., New York, N. Y. 10016.
Cooperating group(s): State and local agencies.
Publications: To be published in Sight-Saving Review, quarterly journal of the National Society for the Prevention of Blindness.

23-GD-2 NEUROPSYCHOLOGICAL ASSESSMENT OF BRAIN-DAMAGED CHILDREN

Purpose: To evolve reliable and valid neuropsychological tests with which to identify the organic deficits associated with various types of brain damage in young children and early adolescents, and to document the natural history of head trauma in children by a prospective, longitudinal, multidisciplinary approach.
Subjects: Children, ages 3 to 15, with acute head injury, chronic brain damage due to infectious disease, or minimal brain damage with no known etiology; normal children matched on a one to one basis.
Methods: A medical-neurological examination and neuropsychological examination using Halstead (Reitan) Battery, Benton Tests, and WISC are made of all children, and an EEG taken on those with acute head injury and minimal brain damage. Those with head injury are reexamined at yearly intervals for five years, and those with chronic and minimal brain damage reexamined once. The normal children are reexamined depending on the clinical groups to which they are assigned.
Duration: April 1965-1970.
Investigator(s): H. Klonoff, Ph.D., Associate Professor and Head, Section of Psychology, Department of Psychiatry, G. C. Robinson, M.D., Associate Professor, Department of Pediatrics, and G. B. Thompson, M.D., Assistant Professor and Head, Division of Neurosurgery, Department of Surgery, University of British Columbia, Vancouver, B.C., Canada.
Cooperating group(s): General Hospital, St. Paul's Hospital, Vancouver; Department of National Health and Welfare of Canada.
Publications: Developmental Medicine and Child Neurology, in press, 1968; article submitted for publication.

23-GE-1 AUTOMATED BEHAVIOR THERAPY FOR SENSORIMOTOR PERFORMANCE DISABILITIES IN HANDICAPPED CHILDREN

Purpose: To provide children suffering motor performance deficits with regulated exercises that encourage high levels of performance output on tasks requiring body movements specific to the nature of their disabilities; to meet this objective with automated procedures subjects can operate independently without constant supervision and intervention of a therapist; to make detailed records of performance in order to chart progress in treatment from session to session; to investigate changes in performance over time as a function of reinforcement contingencies, response requirements, and disability; to investigate new procedures for use with subjects whose disabilities have not hitherto been amenable to exercise therapy procedures.

Subjects: School children in special education programs; clinical inpatients and outpatients in rehabilitation settings.
Methods: An automated behavior analysis system provides audiovisual and/or token reinforcement for "correct" responses on a variety of response devices that require specific manipulative or other body control functions for successful performance of sequential operants. Response tasks are graded according to level of difficulty and nature of disability. Therapist records detailed performance data at conclusion of each session and modifies feedback programs and task requirements in successive sessions according to subjects' changing levels of performance capability.
Findings: Moderately and severely retarded children between C.A. 3.5 and 12 years with specific disabilities of manipulation and grasp demonstrated significant differences in performance accuracy between age levels and diagnostic groups; selected subpopulations of Down's syndrome cases showed significant performance improvements across sessions. Preliminary findings with rehabilitation patients suggest higher levels of performance output and accuracy than previously encountered with other exercise therapy procedures.
Duration: September 1967-indefinite.
Investigator(s): Bernard Z. Friedlander, Ph.D., Research Psychologist, Department of Rehabilitation Psychology, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Orchard School for Special Education, Skokie, Ill.; Neurological and Rehabilitation Hospital, University Hospitals, Madison, Wis. 53706.
Publications: American Psychologist 22:7:589, 1967; papers to appear in psychological and rehabilitation journals.

23-GE-2 TRAINING IN VISUAL PERCEPTION FOR YOUNG DEAF CHILDREN TO STIMULATE SCHOOL READINESS

Purpose: To study the effectiveness of a visual training program in stimulating and accelerating the progress of young deaf pupils in speech reading, reading words and object association, and speech; to determine whether there is apparent lasting carryover value from the training; to prepare classroom materials that may be used to develop visual perception skills.
Subjects: Two beginner classes of deaf children, the majority of whom are from culturally and economically disadvantaged families and have had inadequate preparation for participation in a school learning situation.
Methods: Prior to training sessions, all children were given a battery of tests including learning aptitude and visual discrimination tests. One-half of the pupils in each class were then given individual vision perceptual training for 10 weeks; the remaining subjects received individual training for the second 10-week period, during which time the first group was given no additional training. At the end all children were retested and, after a period of time, the complete test battery was readministered. Test results were analyzed to determine whether there were gains in learning aptitude scores and visual dissemination, and whether any gains noted immediately after the training seem to be retained over a period of time. In addition, records of classroom performance and behavior were analyzed.
Duration: Completed.
Investigator(s): Rachel F. Rawls, M.S., Director of Research, The Governor Morehead School, 301 Ashe Ave., Raleigh, N. C. 27606.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-GE-3 VISUALLY DISCRIMINATED BEHAVIOR IN A "BLIND" ADOLESCENT RETARDATE

Purpose: To establish visually discriminated behavior in a boy diagnosed organically blind: to evaluate his visual acuity in the laboratory, and to determine the extent to which he would use vision when the environment outside the laboratory supported such behavior; to train him to fixate the eyes of other persons, and to test the generality of any learning of this response.
Subjects: Retarded 16-year-old male, diagnosed organically blind, institutionalized for 16 months prior to study.
Methods: The boy was given food and praise for correct choices in a two choice discrimination task where the correct choice could be determined only from visual cues. As performance improved, the size of stimuli was decreased. He was reinforced for eye fixation following instructions to look at the experimenter; for a few sessions he was reinforced for any behavior other than fixation. In the cafeteria, previously available help in obtaining food items was withdrawn, and only briefly reinstated. He was trained to eat appropriately following the experimenter's instructions and verbal praise and punishment.
Findings: He was able to respond discriminatively to stimuli as small as 18 point type at better than chance level. He was trained to look at the experimenter's eyes when instructed to do so; control procedures revealed that the reinforcement contingency functioned to establish and maintain this behavior. Generalization was limited. He learned to help himself in the cafeteria.
Duration: April-August 1967.
Investigator(s): Stephanie B. Stolz, Ph.D., Director of Research, Jewish Foundation for Retarded Children, 6200 Second St., N. W., Washington, D. C. 20011; and Montrose M. Wolf, Ph.D., Associate Professor of Psychology, University of Kansas, Lawrence, Kan. 66045.
Cooperating group(s): Kansas Neurological Institute; Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: To be submitted to Journal of Applied Behavior Analysis, 1968.

23-GE-4 THE DEVELOPMENT OF SPEECH COMMUNICATION SKILLS IN DEAF INFANTS THROUGH THE USE OF LOW FREQUENCY AMPLIFICATION

Purpose: To investigate the extent to which normal patterns of development, particularly of speech communication skills, can be promoted in infants born with impaired hearing.
Subjects: Newborns in maternity hospitals, infants attending well baby clinics, and children referred by pediatricians; controls.
Methods: Hearing tests are administered, and rehabilitation measures, including low frequency amplification, are initiated as soon as deafness is diagnosed. Some relationships between the duration of sensory deprivation (birth to beginning of training) and development will be examined. Subjects and normally hearing controls will be periodically evaluated to fourth birthday, if possible. Primary data obtained from an observation schedule, tape recordings of speech and vocalization, objective measures of speech-sound discrimination, schedules of behavior development, and data from regular, psychiatric, pediatric, otologic, and audiologic examination will be collected and evaluated.
Duration: April 1966-March 1971.
Investigator(s): Daniel Ling, M.Sc., Director, Project for Deaf Children, McGill University, and Hollie E. McHugh, M.D., Institute of Oto-Laryngology, McGill University and Royal Victoria Hospital, Montreal 25, Quebec, Canada.
Cooperating group(s): Canadian National Health grant; Junior League of Montreal.

Publications: Volta Review, 1968; American Annals of the Deaf, February 1968; Journal of Auditory Research, 1967; others. Final report planned in 1971; interim articles, publications, and information available from Mr. Ling.

23-GE-5 HOME TEACHING FOR PARENTS OF YOUNG DEAF CHILDREN

Purpose: To explore and evaluate the feasibility of providing language instruction to parents of deaf children in a home-like environment rather than a clinic or school setting.
Subjects: 52 deaf children and their parents.
Methods: Children were accompanied by parents on 10 weekly visits to a simulated home setting, where teachers trained parents to incorporate communication training in their own household activities. Parents were encouraged to bring in materials from their own homes, and lessons involved common tasks such as ironing clothes, preparing lunch, or vacuuming the floor. In addition, parents attended evening classes.
Findings: Concept of home teaching has received widespread dissemination.
Duration: September 1964-August 1967.
Investigator(s): Edgar L. Lowell, Ph.D., Administrator, John Tracy Clinic, 806 W. Adams Blvd., Los Angeles, Calif. 90007.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Copies of final report on file at John Tracy Clinic.

23-GE-6 GROUP WORK WITH MOTHERS OF SPINA BIFIDA CHILDREN

Purpose: To assess mutual problems of families with a spina bifida child; to ascertain whether group work is an efficient and/or helpful method of assisting these families; to attempt to learn how the children react to each other.
Subjects: Three mothers, ages 20 to 30, whose first child had spina bifida.
Methods: Mothers were interviewed individually and in a group, and interviews were recorded at length to enable evaluation of observed changes throughout duration of project. Children received physiotherapy together.
Findings: There were a number of mutual problems which encouraged the mothers not to see their children as "different", and to participate in the group. Group work proved an efficient and helpful method of dealing with these problems. Children reacted well together and encouraged one another.
Duration: November 1966-March 1968.
Investigator(s): Sheila Smith, M.A., Senior Medical Social Worker, Royal Aberdeen Children's Hospital, Aberdeen, Scotland.
Cooperating group(s): Physiotherapy Department, Royal Aberdeen Children's Hospital.
Publications: Results available from Mrs. Smith.

23-GE-7 MINIMAL BRAIN DYSFUNCTION IN THE HILO CLINIC

Purpose: To evaluate work done with patients diagnosed as having minimal brain dysfunction.

Subjects: Children, ages 4 to 18, referred to the Mental Health Services Clinic beginning in 1960 with problems of behavior and/or lack of academic progress.
Methods: Patients' records are analyzed, and statistical attempts are made to arrive at causal categories and treatment results.
Findings: Medical and psychotherapeutic types of treatment seem to be successful.
Duration: February 1968-December 1969.
Investigator(s): Mildred C. Mendenhall, Ph.D., Clinical Psychologist (Retired), State Mental Health Services, Hilo, Hawaii 96720.
Publications: Results will be available from Dr. Mendenhall or the Hilo Clinic after 1969.

23-GE-8 AN EXPERIMENT IN COMPREHENSIVE SERVICE TO PARENTS OF EXCEPTIONAL PRESCHOOL CHILDREN

Purpose: To provide informational and counseling services to parents of preschool exceptional children in an effort to create a more favorable family environment and to encourage increased parental participation in the educational and therapeutic program of United Cerebral Palsy of Queens.
Subjects: Parents who have enrolled their children in the agency's preschool program.
Methods: Parents are required to devote two half-days per week to parent-centered activities such as attendance at lectures concerning child development and exceptional children, participation in therapeutic group meetings, attendance at monthly evening review conferences, individual casework and psychological counseling, and serving as classroom aides to disabled children under professional supervision. A visiting nurse service assists parents in transferring knowledge gained from these activities to the home situation.
Duration: Not reported.
Investigator(s): Daniel Wieder, M.A., Executive Director, United Cerebral Palsy of Queens, 82-25 164th St., Jamaica, N. Y. 11432.
Cooperating group(s): Association for the Aid of Crippled Children.

23-GE-9 PERCEPTUAL-MOTOR TRAINING GROUP

Purpose: To enhance perceptual-motor integration of cerebral palsied children.
Subjects: Children, ages 7 to 11.
Methods: Small groups of five to seven children each meet for 30 minutes twice a week for group activities planned and guided by two occupational therapists. Group activities are followed up in classroom settings and in some cases in individual treatment. Carryover in these areas is assessed.
Findings: Most of the children in these groups have made measurable gains.
Duration: February 1967-June 1968.
Investigator(s): Geraldine Seeber, B.S., O.T., and Carolyn Ayres, B.S., O.T., Staff Occupational Therapists, Richmond Cerebral Palsy Center, 1308 Sherwood Ave., Richmond, Va. 23220. (Reported by Inge W. Horowitz, OTR, Treatment Program Coordinator, Richmond Cerebral Palsy Center.)
Cooperating group(s): School of Occupational Therapy, Virginia Commonwealth University, Richmond, Va. 23220.

Publications: A 20-minute silent black and white film depicting a sampling of some of the activities used in group play was shown and discussed at a Washington, D. C. Occupational Therapy Association Workshop, September 1968.

23-GE-10 AUTOMATED LANGUAGE TESTS AND ENRICHMENT FOR DEAF INFANTS

Purpose: To investigate the nature of receptive language deficits, the effects of amplification on listening experience, and the effect of systematic training in audio and language perception on listening performance in infants and young children with a severe hearing loss.
Subjects: Children known to have severe hearing deficits.
Methods: Automated devices which have been proven useful in evaluating listening preferences in normal infants and in institutionalized children with diffuse moderate hearing disability are adapted, by means of a tape recorded closed circuit television and stereo audio, to an evaluation of listening performance and the enrichment of listening opportunities in subjects. Integrated program combining these instruments and carefully designed preschool activities provides a research framework for determining the effectiveness of enrichment treatment.
Duration: September 1968-continuing.
Investigator(s): Bernard Z. Friedlander, Ph.D., Research Psychologist, Department of Rehabilitation Psychology, and Claude S. Hayes, Ph.D., Chairman, Department of Communicative Disorders, University of Wisconsin, Madison, Wis. 53706; Spiro B. Mitsos, Ph.D., Executive Director, The Rehabilitation Center, Evansville, Ind.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-GF-1 SOCIAL CLASS DIFFERENCES IN THE ATTITUDES TOWARD DISABLED CHILDREN

Purpose: To study whether the degree to which different types of disabilities threaten family status varies by social class; specifically, to test three hypotheses: (1) different social classes have different values; (2) the life chances of the different social classes are related to types of occupations customarily pursued by members of these classes, the type of training required, and general ways of adjusting to the social environment; and (3) a particular disability category frustrates the pursuit of the values of one class more than it frustrates the pursuit of values of another class.
Subjects: A general population sampling of 400, stratified by social class.
Methods: Groups of adults will be given a disability comparison questionnaire comparing attitudes toward mental retardation, speech defect, emotionally disturbed acting out behavior, emotionally disturbed withdrawn behavior, physical disability of arm, hand, or finger, disfigurement, or other physical disability. Subjects are known to belong to groups in which a high proportion of the membership is usually associated with a given social class. Analysis of responses will determine whether class-linked attitudes towards disabilities exist in the general population. Respondent's social class is identified by three separate methods.
Duration: August 1968-January 1969.
Investigator(s): Robert P. Overs, Ph.D., Research Coordinator, Curative Workshop of Milwaukee, 750 N. 18th St., Milwaukee, Wis. 53233.
Cooperating group(s): Easter Seal Research Foundation, National Easter Seal Society for Crippled Children and Adults.

Mentally Retarded

23-HB-1 BEHAVIORAL ASSESSMENT OF NEONATES AT RISK FOR MENTAL HANDICAPS

Purpose: To establish systematic observation procedures and behavioral measurement categories for earlier detection of neonates at risk for subsequently determined mental handicaps and/or mental subnormalities. To explore sensory-perceptual development in the early periods of life, the means by which the family reinforces perceptual "styles", and how they are manifested in personality and intellectual behaviors.
Subjects: Infants born at the National Naval Medical Center.
Methods: On the basis of information obtained from the National Naval Medical Center's Ob-Gyn record-keeping system, mothers will have been given a weighted probability for having a child "at risk" after delivery. Neonates selected for study will receive the first observational test sequences during the lying-in period. Subsequent observations will be made during outpatient visits to the Children's Diagnostic and Study Branch of the National Institute of Child Health and Human Development. A terminal evaluation, including neurological and audiometric examinations, will be made when the child is two years old.
Duration: 1967-1969.
Investigator(s): Adam P. Matheny, Jr., Ph.D., Department of Pediatrics, University of Louisville School of Medicine, Louisville, Ky. 40202.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-HC-1 SOCIAL AND COMMUNICATION BEHAVIOR OF RETARDED ADOLESCENTS IN LABORATORY SITUATIONS

Purpose: To investigate communication, giving, and sharing in a two-person laboratory situation.
Subjects: Retarded children.
Methods: Two subjects are placed in a situation (modified, two-person Wisconsin General Test Apparatus) in which one subject (the operator) delivers various combinations of reinforcement to himself and to the other subject (the receiver). The operator can make one of two responses in giving, or sharing social situations. Giving or sharing is determined by whether he makes a response which delivers reward to the receiver. In the communication experiment, the operator can make one of four responses, but if the operator and receiver are to obtain more than a chance amount of reward, the receiver must communicate which response is to be made. Data are analyzed by both group and individual pair methods.
Findings: Retarded adolescents as a group deliver rewards to their peers when it does not cost them to do so. Receivers with relatively high language skills make more correct responses in the communication situation than do receivers with relatively low language skills.
Duration: 1960-1968.
Investigator(s): Joseph E. Spradlin, Ph.D., Parsons State Hospital and Training Center, Parsons 67357, and Bureau of Child Research Laboratory, and Frederic L. Girardeau, Ph.D., Coordinator, Research Training, Bureau of Child Research Laboratory, Children's Rehabilitation Unit, University of Kansas Medical Center, Kansas City, Kan. 66103.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: American Journal of Mental Deficiency.

23-HC-2 THE DEVELOPMENT OF THE SOCIAL CONCEPT GROUP AMONG MENTALLY RETARDED CHILDREN

Purpose: To investigate the understanding and concept of group activity among mentally retarded children to make possible more meaningful instruction.
Subjects: 120 mentally retarded and normal youths drawn from family and institutional settings and separated into three matched groups: retardates with an I.Q. of 50-65 and a mean chronological age of 12 years; normal children with a mean chronological age of six years; normals with a mean chronological age of 12 years.
Methods: Modified versions of the Thematic Apperception Test and projective tests were devised and administered. Interviewers observed and recorded the various activities of the subjects. Data were analyzed by scale analysis, product moment correlation, and analysis of variance procedures.
Duration: Completed.
Investigator(s): Lloyd Taylor, Ph.D., Phillips University, Enid, Okla. 73701.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-HC-3 CURIOSITY BEHAVIOR IN EDUCABLE MENTALLY RETARDED ADOLESCENTS--CHARACTERISTICS, MODIFIABILITY, AND EFFECTS OF TRAINING

Purpose: To examine characteristics of curiosity motivation in educable mentally retarded adolescents; to establish correlates of individual differences in curiosity behavior among retarded learners; to train incurious educable mental retardates for increased orientation towards complex and unfamiliar stimulus qualities; to study the effects of perceptual curiosity training.
Subjects: Educable mentally retarded and intellectually normal adolescents; incurious retarded adolescents.
Methods: Perceptual curiosity activity is studied in educable mentally retarded and normal groups through examination of preferences in contrasting two-choice stimulus sets; correlates of this choice are also assessed. Same or similar sets are used to train incurious retarded subjects in the choice of relatively complex stimuli. Effects of curiosity training are studied by examination of the relative effectiveness of intrinsic rewards on discrimination learning for trained and untrained subjects and examination for increased interest in unknown information among trained subjects.
Duration: Not reported-August 1968.
Investigator(s): Martin B. Miller, Ph.D., Graduate School of Education, Yeshiva University, New York, N. Y. 10003.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-HC-4 FACTORS RELATED TO SPEECH HEARING BY MENTALLY RETARDED CHILDREN

Purpose: To investigate the auditory behavior of mentally retarded children with respect to speech hearing ability; to study the relationships among test performance and selected measures of mental age, chronological age, I.Q., and physiological age.
Subjects: 200 children, ages 6 to 18, with I.Q.'s ranging from 60 to 90.
Methods: Subjects from the schools and institutions of Pennsylvania are tested for intelligence measures, physiological age, and speech hearing ability. Multiple factor analysis will be used to test for interaction among measures.

Duration: July 1968-January 1969.
Investigator(s): Bruce M. Siegenthaler, Ph.D., Director, Speech and Hearing Clinic, Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-HC-5 A LONGITUDINAL STUDY OF INTELLIGENCE IN RETARDED INSTITUTIONALIZED CHILDREN

Purpose: To study the effects of continuous institutionalization on retarded children.
Subjects: Institutionalized retardates, ages 5 to 20.
Methods: Several hundred records of patients at a state home and training school are being analyzed. Changes in I.Q. and M.A. are correlated with length of institutionalization, age at first institutionalization, and type of diagnosis. In addition, specific cognitive test components will be related to the same factors.
Duration: September 1968-December 1969.
Investigator(s): A. I. Rabin, Ph.D., Professor of Psychology, Michigan State University, E. Lansing, Mich. 48823.
Publications: To be submitted to American Journal of Mental Deficiency.

23-HC-6 THE ODDITY CONCEPT IN SEVERELY RETARDED CHILDREN

Purpose: To study the oddity performance of severely retarded children of a given M.A. level, and to compare it to that reported for young normal children of the corresponding C.A. level by Gollin and Shirk (Child Development, 1966).
Subjects: All Central Wisconsin Colony residents who were reported to have an M.A. of three years or better at the time of their most recent psychological evaluation: 40 subjects with C.A.'s ranging from 7-1/2 to 43.
Methods: Subjects were tested individually, using an apparatus consisting of three windows in which red, blue, or green lights were displayed, with a response button below each. After a series of trials designed to acquaint subject with the apparatus, the three-choice, three-position oddity trials were begun with candy reinforcement given every time subject chose the odd color. Testing continued until subject reached a criterion of six consecutive correct responses, or to the maximum of 54 trials, counterbalanced for color and position of the correct choice.
Findings: No significant differences were found in the performance (number correct) of the M.A. 3 and M.A. 4 groups; differences between the M.A. 4's and the M.A. 5-and-above group were significant. C.A. was inversely related to performance; higher C.A. was also related to response perseveration. Performance of the M.A. 4 group was inferior to that of normal preschoolers (average C.A. = 4.2).
Duration: June-August 1967.
Investigator(s): Nolan E. Penn, Ph.D., Assistant Professor, Student Counseling Center, University of Wisconsin, Madison 53706; Ronald M. Sindberg, Ph.D., Research Director, and M. Judith Wohlhueter, M.A., Research Analyst, Central Wisconsin Colony and Training School, 317 Knutson Dr., Madison, Wis. 53704.
Publications: Accepted for publication in Child Development, 1969.

23-HF-1 PKU COLLABORATIVE STUDY

Purpose: To collect and evaluate the information on phenylketonuric children treated in the United States between 1960 and 1965 in an attempt to determine the value of the treatment more precisely; to identify chemical and other aspects affecting the results; and to provide information that can be the basis for standardization of treatment and evaluation.
Subjects: To date, information has been collected from private physicians and clinics throughout the country identifying 666 known phenylketonurics; additional patients and information are still being collected.
Methods: Information is collected from participating physicians through questionnaires and interviews and then processed by a system of numerical coding for computer usage and storage. Statistical analyses and recovery programs are performed.
Duration: July 1966-June 1969.
Investigator(s): W. Eugene Knox, M.D., Associate Professor of Biological Chemistry, Harvard Medical School, and Research Associate, Cancer Research Institute, New England Deaconess Hospital, Boston, Mass. 02115. (Reported by Kathryn T. Muller, Computer Coordinator, Cancer Research Institute.)

23-HF-2 COLLABORATIVE STUDY OF CHILDREN TREATED FOR PHENYLKETONURIA

Purpose: To increase knowledge and understanding of phenylketonuria; to evaluate all dimensions of the disease, including social factors, biochemical characteristics, and related cognitive abilities, with focus on the intellectual and physical consequences of treating phenylketonuric children with a low phenylalanine diet.
Subjects: Approximately 60 children per year from 11 states, identified through routine screening of all newborns as displaying the biochemical characteristics of phenylketonuria.
Methods: Children are randomly assigned to one of two treatment groups. Group I is composed of children for whom the serum phenylalanine level has been maintained between 1.0 and 5.5 mg. percent. Group II represents children maintained between 5.6 and 9.9 mg. percent serum phenylalanine. These two groups and their siblings and parents will be tested and evaluated over an eight-year period. An extensive schedule of assessment is planned, including frequent psychological, biochemical, social, and clinical determinations.
Duration: October 1967-October 1975.
Investigator(s): Richard Koch, M.D., and James C. Dobson, Ph.D., Coordinator, Division of Child Development, Children's Hospital, Los Angeles, Calif. 90027.
Cooperating group(s): States cooperating in this study are California, Colorado, Florida, Illinois, Iowa, Nebraska, New York, Oregon, Texas, Washington, and Wisconsin.
Publications: New England Journal of Medicine 278:21:1142-1144, May 23, 1968.

23-HG-1 PERSONALITY DEVELOPMENT IN DOWN'S SYNDROME

Purpose: To identify the crucial factors in the personality development of retarded children, particularly those with Down's syndrome.
Subjects: 20 in- and outpatients of Children's Hospital.
Methods: Currently being developed.
Duration: July 1968-June 1973.
Investigator(s): Leon Cytryn, M.D., Research Associate, Children's Hospital, Washington, D. C. 20009.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-HH-1 PROGRAMMED HABILITATION OF SEVERELY RETARDED CHILDREN

Purpose: To develop an effective total habilitation program for severely retarded children which will produce greater self-sufficiency and self-control and more productive and socially appropriate behavior than is currently being realized.
Methods: Experimentally examined and replicable procedures based on established psychological learning principles are applied by parents, attendant personnel, and teachers. Techniques are those that have been applied successfully to the behavior of psychotic children and adults and preschool normal children in field situations, and include behavior therapy, programmed instruction, and operant conditioning. Evaluation is contingent upon further development of reliable free-field measurement techniques and training nonprofessional personnel.
Duration: September 1965-August 1968.
Investigator(s): J. S. Birnbrauer, Ph.D., Assistant Professor of Psychology, University of North Carolina, Chapel Hill, N. C. 27514.
Cooperating group(s): Public Health Service, U. S. Department of Health, Education, and Welfare.

23-HI-1 THE DEVELOPMENT OF A PHYSICAL EDUCATION PROGRAM FOR TRAINABLE MENTALLY RETARDED CHILDREN AND YOUNG ADULTS

Purpose: To test the hypothesis that trainable mental retardates can benefit from organized physical education instruction; to plan a program and program materials to meet specific needs for social adjustment and motor ability development.
Subjects: Mental retardates, ages 6 to 30.
Methods: Subjects are divided into eight groups of ten each according to their scores on a devised motor ability test; the eight groups consist of two matched groups each of primary, intermediate, prevocational, and young adults. One-half of each of the four matched groupings receive the experimental treatment. Experimental and control group retest scores taken after treatment are analyzed, and teacher ratings after treatment interval are compared with ratings taken at the time of participant selection.
Duration: Not reported.
Investigator(s): Alice Pigman, Opportunity Center School, 215 - 21st Ave. S., Birmingham, Ala. 35205.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-HI-2 VOCATIONAL DEVELOPMENT OF MENTALLY RETARDED ADOLESCENTS

Purpose: To complete an earlier study of the vocational development of 14-year-old mental retardates, the effects of rehabilitation, and the identification of variables necessary for successful functioning as adults.
Subjects: Two groups of mentally retarded students.
Methods: Variables studied are self-concept, behavior in simulated work, intelligence changes, aspiration, and social behavior. Subjects are reassessed annually in a diagnostic work situation; psychological tests are administered, and interviews take place at home and work. Predictions for work situations are made between experimental and control group differences, and comparisons are made for the variables. All findings are cross-validated, and repeated measures allow for discussion of the developmental patterns of the variables for these subjects. Outline evaluations derived are structured cohesively for attainment.

Duration: 1965-not reported.
Investigator(s): Lee S. Shulman, Ph.D., Department of Counseling Personnel Services and Educational Psychology, College of Education, Michigan State University, E. Lansing, Mich. 48823.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-HJ-1 HABILITATION OF DISTURBED ADOLESCENT MALE RETARDATES

Purpose: To provide an intensive treatment program in Porterville State Hospital for emotionally disturbed adolescent retardates in an attempt to return them to the community.
Subjects: 42 emotionally disturbed male adolescent retardates.
Methods: Patients are divided into six groups of seven each. A highly organized closed environment is created in which as much behavior as possible may be programmed to yield immediate consequences for the subject; each patient will be individually programmed so that individual granting and withdrawal of rewards may be made contingent upon his behavior. It is anticipated that the repeated learning trials will eventually teach the asocial patient specific acceptable social skills and the realization that his behavior always yields consequences. The program will be evaluated through comparison of changes in patients' behavior before, during, and after treatment; further success will be reflected in the return of these individuals to the community.
Duration: June 1966-May 1969.
Investigator(s): James T. Shelton, M.D., Superintendent and Medical Director, and John C. Schoenherr, Ph.D., Chief Psychologist, Porterville State Hospital, P. O. Box 2000, Porterville, Calif. 93257.
Cooperating group(s): National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Mental Retardation 6:2:30-33, April 1968.

23-HJ-2 PSYCHOSOCIAL TREATMENT UNIT

Purpose: To establish a psychosocial treatment unit to prevent adolescent mentally retarded residents of White Haven State School and Hospital from becoming "institutionalized".
Subjects: Mentally retarded residents, ages 13 to 21, with an I.Q. of 50 or above and no serious physical or emotional impairments.
Methods: A psychosocial treatment unit has been established in which the residents' basic needs of acceptance, understanding, consistency, etc. are met through the utilization of cottage parents. A ward building was renovated to resemble a home setting as much as possible; programming is specialized to improve the residents' interpersonal relationships, to assist them in developing good work habits, and to help them become aware of job expectations. Emphasis is given to community activity. A group worker has primary responsibility in the unit, and with a mental health worker, recreation worker, consulting child psychiatrist, and clinical psychologist, plans a specialized program for each resident.
Duration: January 1967-December 1969.
Investigator(s): Francis P. Colizzo, M.D., Superintendent, Joseph J. Scartelli, M.S.W., Director of Social Service, and staff, White Haven State School and Hospital, White Haven, Pa. 18661.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

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23-HJ-3 INTENSIVE SOCIALIZATION PROGRAM FOR MILDLY RETARDED

Purpose: To develop an interdisciplinary team consisting of a behavioral scientist, psychologist, social worker, community work specialist, and language specialist to implement socialization programs in an institution for the retarded.
Subjects: Groups of 60 mildly retarded residents each, including (1) adolescents manifesting socially disruptive behavior, (2) young adults assigned to an intensive rehabilitation program, and (3) young adults considered to be rehabilitation "failures" and/or "institutionalized".
Methods: Specific techniques of behavior modification are selected from areas of casework, group dynamics, counseling, operant conditioning, and special education. Emphasis will be on development of effective working relationships with families and community agencies, with particular focus on admission, predischarge, and postdischarge contacts. Professional staff will train and supervise attendants and volunteers. Results will be evaluated.
Duration: 1965-May 1970.
Investigator(s): Bill Doggett, Superintendent and Director, and Oliver Graebner, Ed.D., Psychologist and Codirector, Hospital Improvement Project, Austin State School, P.O. Box 1269, Austin, Tex. 78767.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-HJ-4 STUDY OF RESIDENTIAL CARE FOR SEVERELY SUBNORMAL CHILDREN

Purpose: To compare the traditional care of subnormal children, consisting of separately based residential and welfare services, with a comprehensive, community-based residential and welfare service.
Subjects: An experimental group of all severely subnormal children from two population areas of 100,000 who require residential care and who will be accommodated in community-based hostels; two control groups: subnormal children from two comparable population areas who remain in traditional institutions, and a comparable group of children living in their own homes.
Methods: Medical, psychological, developmental, and behavioral assessment of children's progress; social assessment of family problems; measurement of management practices of those caring for children, and of cost and administrative effort in the traditional and experimental services.
Duration: 1968-1972.
Investigator(s): Albert Kushlick, M.D., Senior Research Officer, Paul Williams, Gill Cox, and Elisabeth Gruber, Research Officers, Wessex Regional Hospital Board, Romsey Rd., Winchester, Hants, England.
Cooperating group(s): Medical Research Council; Institute of Education, London University.
Publications: Plan to publish.

23-HJ-5 INTENSIVE CARE OF YOUNG RETARDED CHILDREN AT WAIMANO

Purpose: To provide intensive care, treatment, and training to severely retarded young children in an institutional setting.
Subjects: 26 boys and 5 girls, multiply handicapped, ages 5 to 15, social quotient 8 to 46, and of multiracial background.
Methods: Each child was given a complete medical examination, followed by treatment and care by a multidisciplinary team. Next, each child was programmed according to his individual needs and capabilities. Training was conducted primarily in the areas of feeding, toilet training, ambula-

tion, dressing and undressing, speech, and socialization. The technique of choice was operant conditioning. An attempt was made also to work with parents of the children, and a parental attitude scale was developed.

Findings: All children improved in at least one area of training as measured by specific rating scales.

Duration: June 1968-May 1969.

Investigator(s): Garret H. Yanagi, Ph.D., Project Director, Hospital Improvement Project, Waimano Training School and Hospital, Pearl City, Hawaii 96782.

Publications: Annual report available from Dr. Yanagi.

23-HJ-6 PROGRAMS IN ADAPTABILITY TRAINING: TEACHING PARENTS TO WORK WITH THEIR CHILDREN

Purpose: To provide instruction, models, practice, and supervision so that parents can modify maladaptive behaviors in their children; to determine whether specific instruction in handling one behavior is transferred to handling other behaviors.

Subjects: Mentally retarded children under 10 years of age who are unable to cope successfully with the home or school environment; their parents.

Methods: Children are provided with programmed instruction based on a variety of psychological principles, including operant conditioning, modeling, and guiding of responses. Parents are given written booklets with programs and data collection pages. Followup interviews and objective assessment 6 and 12 months after training will determine effectiveness of approach.

Findings: Initial goals for change in children are met to preselected criterion level in 88 percent of cases. For the small number of cases past the six-month date, gains are maintained and parents generalizing.

Duration: September 1967-September 1970.

Investigator(s): Sue Allen Warren, Ph.D., Director, Psychology Department, and Herbert J. Grossman, M.D., Director, State Pediatric Institute, 1640 W. Roosevelt Rd., Chicago, Ill. 60608.

Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

Publications: Articles in preparation for journal publication.

23-HK-1 CHANGES IN PARENTAL EXPECTATIONS ABOUT THEIR RETARDED CHILD: EFFECTS DUE TO PARENTAL VARIABLES AND DIAGNOSTIC COUNSELING

Purpose: To study the accuracy with which parents view their retarded child's present behavior, the relationship between the parents' view of present behavior and future expectations, and how both the view of present behavior and future expectations are affected by diagnostic counseling.

Subjects: Families of children seen at the Children's Diagnostic and Study Branch of the National Institute of Child Health and Human Development.

Methods: Parental estimates and expectations of their child's abilities, problem areas, educational level, etc., are determined before and after the child is seen at the Diagnostic and Study Branch. Records are kept on the diagnostic counseling session showing relationships between dynamic exchange of information, invariant modes by which informational exchanges are made, and level of generality at which information is exchanged.

Duration: 1967-1969.

Investigator(s): Adam P. Matheny, Jr., Ph.D., Department of Pediatrics, University of Louisville School of Medicine, Louisville, Ky. 40202.

Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-HK-2 PARENTAL ADAPTATION TO PHENYLKETONURIA

Purpose: To determine specific stresses of PKU which affect parental adaptation.
Subjects: 48 families of children diagnosed under age six as having PKU, under medical treatment, and living in their own homes.
Methods: Five scales were constructed to rate parents on (1) general adjustment to PKU, (2) existence of problems at time of diagnosis (level of family stability or coping capability), (3) level of dietary control, (4) level of effectiveness of parental cooperation with medical personnel, and (5) level of parental understanding of the disorder. Parents were interviewed in depth with a structured interview schedule in their own homes and data analyzed.
Findings: Parents generally made inadequate adaptations to PKU. Adjustments were directly related to the nature of parental responses to medical care. Dietary management tended to be positively associated with understanding of the disorder. The stress of the genetic information appears to be the crux of the intense diagnostic reactions. Two reaction patterns were identified according to the child's age at time of diagnosis.
Duration: December 1966-August 1967.
Investigator(s): Sylvia Schild, D.S.W., Assistant Professor, California State College, Los Angeles, Calif. 90032.
Cooperating group(s): Child Development Division, Children's Hospital of Los Angeles; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Article submitted to Pediatrics, May 1968; unpublished manuscript available through University Microfilms, University of Michigan, Ann Arbor.

23-HK-3 THE EFFECT OF DIFFERENCES IN CURRICULA AND EXPERIENCES ON SOCIAL WORK STUDENT KNOWLEDGE AND ATTITUDES ABOUT MENTAL RETARDATION

Purpose: To evaluate the impact of educational and life experiences on changing student attitudes toward the retarded as a client group, and to assess the relationship between cognitions, feelings, and behavior in this area.
Subjects: 567 beginning and graduating students selected at random from seven graduate schools of social work, purposively sampled according to variations in curriculum activity in mental retardation.
Methods: Data were collected through a series of self-administered instruments including a personal data sheet, semantic differential rating scales, knowledge inventory, and client preference rank order scale. Between- and within-group comparisons were computed with respect to knowledge, attitudes, and client preferences. Analysis was also made of the relationship between cognitions, attitudes, and action tendencies.
Findings: Cognitions, feelings, and action tendencies are not consistently related except at the extremes of the valence continuum. Knowledge derived through direct contact with retarded persons or their families involving affective experiences have greater impact on the changing of attitudes than knowledge alone. The sources of information (status, esteem, and competence of faculty) are further determinants in the absorption of new knowledge and its integration in attitudes. The introduction of contents on mental retardation in the basic generic curriculum of social work education does not materially affect the knowledge and attitudes of the general student body. Students in field instruction placements in agencies serving primarily retarded clients are most prone to attitude changes, which can be in either direction, but are most often positive.
Duration: April 1967-April 1968.

Investigator(s): Michael J. Begab, Ph.D., Head, Mental Retardation Research Centers Programs, National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.
Publications: Publication pending; copies will be available from Dr. Begab.

Emotionally Disturbed and Mentally Ill

23-JA-1 OBSESSIVE-COMPULSIVE CHILDREN

Purpose: To help diagnose and subsequently treat children who are obsessive-compulsive.
Subjects: Cases of children ages 10 to 18 reported in clinics and mental health units throughout Florida.
Methods: Children's case histories and files are read, and data about their parents, background, economic status, etc., are collected. Psychiatrists and residents in child psychiatry at the University of Florida College of Medicine are interviewed.
Duration: July 1967-July 1968.
Investigator(s): Paul Adams, M.D., Director, Division of Child Psychiatry, and Professor of Psychiatry and Pediatrics, and Valerie Ayer, B.A., Teaching and Research Assistant, J. Hillis Miller Health Center, University of Florida, Gainesville, Fla. 32601.
Publications: Paper planned.

23-JA-2 STUDY OF CHILDREN'S REACTIONS TO THE ROBERT F. KENNEDY ASSASSINATION

Purpose: To discover how a group of psychologically disturbed children perceived the events surrounding the Kennedy assassination; to elicit the nature of their reactions, and to determine whether certain factors such as age, sex, diagnosis, and parental response influence these reactions.
Subjects: 55 children, ages 4 to 17, who were therapy patients at an outpatient clinic at the time of the assassination; 36 parents who were being seen for related services at the same clinic.
Methods: A rating scale covering 24 dimensions of behavior, fantasy, and emotional reactions was scored by therapists during the therapeutic hour immediately following the assassination, and ratings were compared with ratings on the same dimensions during the therapeutic hour preceding the crisis. Children were interviewed during the postcrisis hour with open-ended questions designed to elicit the information regarding circumstances which provided them with their first knowledge of the crisis, their subsequent reactions, and responses of their families. An interview or telephone conversation with the parent covered the same areas as the child's semistructured interview.
Duration: June-December 1968.
Investigator(s): Bernice T. Eiduson, Ph.D., Director, Division of Research, Reiss-Davis Child Study Center, 9760 W. Pico Blvd., Los Angeles, Calif. 90035.
Publications: To be reported at California State Psychological Association Meeting, January 1969; publication to follow.

23-JB-1 AN INVESTIGATION OF LEARNING CORRELATES OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED CHILDREN

Purpose: To determine and evaluate the relationships between categories of emotional disturbance and the learning characteristics of disturbed children.
Subjects: Disturbed and maladjusted boys, ages eight to ten, with conduct or personality problems or problems stemming from inadequacy-immaturity.
Methods: All subjects were given reading achievement and mental ability tests; a psychoeducational evaluation was made of selected subjects. Charting of longitudinal and cross-sectional-based learning characteristics, development of new training and teaching methods, and refinement of educational placement will be furthered with this research.
Duration: Not reported-July 1968.
Investigator(s): Paul S. Graubard, Ed.D., Department of Special Education, Yeshiva University, New York, N. Y. 10003.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-JB-2 ADOLESCENTS IN CRISIS

Purpose: To study family relatedness in crisis situations involving adolescents.
Subjects: Adolescents, ages 13 to 19, referred to McLean Outpatient Clinic; their families.
Methods: Individual intervention and family interviews. Crisis intervention is done either by individual interviews, mostly once a week, or by family interviews once a week. It is scheduled to last about four weeks. An individual interview with the adolescent and an interview with the parents are scheduled initially, followed by a family session with a family therapist. A reassessment and followup of the crisis take place after six months and one year. Family relatedness is assessed from the history and by means of a special questionnaire by three independent raters qualified in child psychiatry.
Findings: Family relatedness or family involvement in adolescent crisis seems larger than expected. The youngest in crisis is most often the oldest child or the oldest of one particular sex.
Duration: July 1967-July 1969.
Investigator(s): Jacob Christ, M.D., Psychiatrist in Charge, and Shirley Goldstein, M.S.S., Supervisor of Casework, McLean Outpatient Clinic, Richard Bonier, Ph.D., and Marvin Snider, Ph.D., Psychologists, John Spillane, M.D., and Irving Kaufman, M.D., Psychiatrists, McLean Hospital, Belmont, Mass. 02178.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Papers presented at meetings of American Psychological Association, 1968, and American Orthopsychiatric Association, 1969.

23-JB-3 PREDICTING ADOLESCENT PSYCHO- AND BEHAVIORAL PATHOLOGY

Purpose: To determine whether adolescents who are classified as behavioral deviants can be identified during the elementary school years.
Subjects: In 1960 Dr. Alan Goldfarb selected and studied a random sample of 514 third, fourth, and fifth grade children from Baltimore. (See Research Relating to Children, Bull. No. 12-O-11.) Ninety-three percent of this sample was located and is utilized in this study.

Methods: Elementary school variables (predictor) will be related to adolescent behavior (criterion) to determine their relative predictive value. Available elementary school variables include race, sex, teacher and psychiatrist evaluation of childhood behavior, school attendance, grade level, I.Q., standardized reading and mathematics scores, number of siblings, position in family, parents' education, number of marriages for mother, working status for mother, and parental supervision of child. High school followup variables include areas of achievement, such as I.Q. drop, reading and mathematics level drop, grade level drop, and low school grades, and areas of adjustment, such as school dropout, school special service record, juvenile court record, truancy, and high residential mobility. Predictive variables for each behavior will be identified, and a scoring system for them will be applied to the subjects to determine the sensitivity and specificity of the instruments. After validation, these instruments should assist future casefinders in identifying high risk elementary school children for referral.
Duration: September 1966-December 1968.
Investigator(s): Carl O. Helvie, M.P.H. (D.P.H. Candidate), Department of Mental Hygiene, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Md. 21205. (Reported by Paul V. Lemkau, M.D., Professor and Chairman, Department of Mental Hygiene.)
Cooperating group(s): Maryland Public Schools; Maryland Psychiatric Case Register; Baltimore City and County Juvenile Court Systems; National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Doctoral dissertation at Johns Hopkins University School of Hygiene and Public Health; plan to publish results with Dr. Paul Lemkau.

23-JC-1 A PILOT STUDY OF SUICIDAL PATIENTS ADMITTED TO A STATE MENTAL HOSPITAL

Purpose: To establish a procedure for prompt identification of newly admitted suicidal patients in a state mental hospital; to develop an instrument with which nursing staff can obtain information for use in caring for these patients; to identify special needs of the patients for program planning in the hospital and community; to obtain epidemiological data on the populations at risk; to provide experience for nursing students and staff in practice-oriented research related to crisis-intervention.
Subjects: Patients of a wide age range whose admission to a state mental hospital was related to a suicide attempt; subgroup of adolescent patients.
Methods: Patients are interviewed and their charts analyzed. Special analysis is being made of adolescent patients.
Findings: Drug abuse seems to be involved in a large proportion of the adolescent suicidal patients, both in style of life and in method of suicide attempt.
Duration: September 1967-December 1968.
Investigator(s): Irving Babow, Ph.D., Research Social Scientist, Napa State Hospital, Imola 94558; Sylvia Bassett, R.N., and Ralph Matteoli, R.N., Assistant Professors of Nursing Education, Chico State College, Chico, Calif. 95927.
Publications: Report available from Dr. Babow; publication planned in a professional journal.

23-JD-1 A CONTROLLED STUDY OF SOME PSYCHOLOGICAL ASPECTS OF BEHAVIOR IN ASTHMATIC CHILDREN

Purpose: As part of a wider asthma epidemiological study: to investigate the level of aspiration of asthmatic children with the mother actively

participating, passively present, and absent, under both high and low stress conditions; to projectively assess the need for achievement; to investigate in both mother and child the reaction to unexpected separation; and to projectively assess the reaction to threat of separation, with special emphasis on determining if claustral regressive themes predominate in the asthmatic population.
Subjects: 50 mildly asthmatic children, ages 10 and 11, randomly selected from the Melbourne metropolitan area, and matched in pairs on seven variables with 50 controls. An asthmatic child is defined as having wheezed at some time in his life without evidence of infection.
Methods: The Rotter Level of Aspiration Board is employed with (1) the children seeing the result of each hit, and (2) the children being told their total score but visually unaware of the result of each hit. Under each condition, mother at one time assists the child in making aspiration estimates; at another, is present, but is occupied in another task; and at another time is absent. All conditions are randomized. Children are given a specially designed children's version of McClelland's technique for assessing the need for achievement, and an abbreviated form of Binet L. By written message, mother is requested to go to another room by herself and fill out a sentence completion test, while the child does the same test after not finding mother waiting as he expected. Finally the child does a Picture-Story Completion Test designed for this study, where the stimulus is threat of separation from mother, and opportunity is given for claustral regressive themes to be given as a response. After this stage of the research is complete, a group of severe asthmatics and a further control group of children with chronic chest infections other than asthma will be investigated with the same design.
Duration: October 1966-indefinite.
Investigator(s): John S. Williams, Senior Psychologist, Department of Psychiatry, Royal Children's Hospital, Melbourne, 3052, Australia.
Cooperating group(s): Clinical Research Department, Royal Children's Hospital Research Foundation.

23-JE-1 TREATMENT AND EDUCATION OF AUTISTIC CHILDREN--COMBINED APPLICATION OF CLINICAL AND LABORATORY METHODS

Purpose: To demonstrate how specific, theoretically based factors known to be successful in psychological laboratories can be applied to practical educational settings in the rehabilitation of severely autistic children.
Methods: A reactive environment was constructed specifically contingent on a child's performance to strengthen existing performances and successively approximate new ones from his current repertoire; other aspects of the milieu were deactivated to weaken some performances such as compulsive behavior, tantrums, and atavisms. First phase involved training of project personnel and planning and construction of experimental devices. Second phase involved modification of methods and experimentation using automatic devices with severely disturbed, nonverbal children and teaching machines, programmed instruction, and other reinforcement techniques in classrooms of more verbal children. Major results of experiment will be incorporated in a specification of the effective procedures which are discovered.
Duration: June 1965-June 1968.
Investigator(s): C. B. Ferster, Ph.D., Department of Psychology, Georgetown University, Washington, D. C. 20007.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-JF-1 CROSS-CULTURAL STUDIES OF FAMILIES OF SCHIZOPHRENICS

Purpose: To determine whether criteria for differentiating families of schizophrenics from other kinds of families apply cross-culturally and thus have generalized validity; to specify features of schizophrenics and their families which are and are not cross-culturally general; to study how variations in the sibling order of schizophrenics are related to cultural patterns of family life.
Subjects: Families of 320 Lebanese psychiatric inpatients, and normal control families; families of 21 late adolescent and young adult psychiatric patients and parents of a small number of childhood psychiatric patients in Japan.
Methods: Sibling data on Lebanese patients have been coded for computer analysis according to sex, age, religion, diagnosis, number of full and half siblings, plus sibling order in relation to both full and half siblings of each sex, both dead and alive. Psychological test protocols have been received from the Japanese subjects and are being translated and scored to be studied comprehensively.
Findings: Preliminary findings indicate that the scoring manuals developed in the National Institute of Mental Health research can be used with these highly diverse psychological test samples obtained in Lebanon and Japan.
Duration: Not reported-continuing.
Investigator(s): Lyman C. Wynne, M.D., Ph.D., and Margaret T. Singer, Ph.D., Family Studies Section, Adult Psychiatry Branch, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.

23-JF-2 SIBLINGS OF SCHIZOPHRENIC CHILDREN

Purpose: To compare children diagnosed as schizophrenic with their siblings with regard to developmental course, intellectual functioning, social skills and development, and neurological and pediatric function.
Subjects: Students enrolled in schools for disturbed children; their siblings.
Methods: Parent interview, psychological, pediatric, and neurological examination; examination of birth, pediatric, and school records.
Duration: November 1966-November 1968.
Investigator(s): Martin Gittelman, Ph.D., Director, Research and Psychological Services, Children's Mental Health and Research Center, League School for Seriously Disturbed Children, Brooklyn; Max Pollack, Ph.D., Senior Research Associate, Hillside Hospital, Glen Oaks; and Ruth Bakwin, M.D., Director, Department of Pediatrics, New York Infirmary, 321 E. 15th St., New York, N. Y.
Publications: To be published in 1969.

23-JF-3 STUDIES ON BIOLOGICAL AND ADOPTIVE PARENTS AND OFFSPRING IN RELATIONSHIP TO SCHIZOPHRENIA

Purpose: To evaluate the relative roles of heredity and environment in the etiology of schizophrenic syndromes.
Subjects: Adopted offspring of schizophrenic parents; biological and adoptive relatives of schizophrenic adults who had been adopted in infancy; adopting parents of adults, now schizophrenic, who had been adopted in infancy.
Methods: Psychiatric interviews and psychological tests.

Findings: Genetic and environmental effects have been separated. There appears to be a genetic effect, magnitude to be determined, in the etiology of schizophrenia, and genetic factors responsible for schizophrenic psychopathology seem to contribute to the presence of other forms of psychiatric disorder not generally regarded as schizophrenia. Relatives of schizophrenic index cases have an increased proportion of nonschizophrenic psychopathology over the control population even when these relatives are not reared in the same household as the index case.
Duration: December 1964-continuing.
Investigator(s): Seymour Kety, M.D., Professor of Psychiatry, Harvard Medical School, Boston, Mass. 02115; David Rosenthal, Ph.D., Chief, and Paul H. Wender, M.D., Research Psychiatrist, Laboratory of Psychology, National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda, Md. 20014.
Publications: The Transmission of Schizophrenia. New York: Pergamon Press, 1968.

23-JG-1 PARENTS AS COTHERAPISTS WITH PSYCHOTIC CHILDREN

Purpose: To identify early signs of childhood psychosis in children under four years of age, and to reverse the disordered processes by demonstrating and teaching techniques to parents; to determine whether such an approach can effectively be used by parents and therapists for developing school readiness in psychotic children.
Subjects: 10 children diagnosed as autistic or psychotic, from intact families willing and able to cooperate in the program.
Methods: Parents observe therapist working with child through a one-way screen. Therapist demonstrates techniques geared to child's individual problem patterns and peculiar usage of receptor modalities. A program is developed which parents carry out on a daily basis at home. Parents demonstrate their interaction while being observed, and rating scales will assess the child-adult interactions. Diagnostic evaluations and tests are administered semiannually to the child. Sessions are recorded on video tape to acquire rater reliability and educational material.
Duration: September 1966-September 1971.
Investigator(s): Eric Schopler, Ph.D., Associate Professor of Psychiatry and Psychology, University of North Carolina School of Medicine, North Carolina Memorial Hospital, Chapel Hill, N. C.
Cooperating group(s): University of North Carolina School of Education; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Will report in journal articles and at meetings.

23-JG-2 FATHER AND SIBLING CONTROL OF DEVIANT CHILD BEHAVIOR

Purpose: To assess parental and sibling influence in the maintenance of deviant child behavior, and to use these possible control sources as therapeutic agents in changing the child's deviant behavior.
Subjects: Two preschool children referred to a clinic because of emotional problems.
Methods: Parents and siblings were observed interacting with subjects, and problem behavior and parental and sibling contingent behavior were recorded. Efforts were then made to shift these contingencies to demonstrate their effect on the problem behavior of the child.
Findings: Parental and sibling behavior which reinforced problem behavior could be used for therapeutic purposes.
Duration: June 1967-May 1968.

Investigator(s): Robert G. Wahler, Ph.D., Associate Professor of Psychology, University of Tennessee, Knoxville, Tenn. 37916.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Submitted to *Child Development*, 1968.

23-JG-3 FAMILY CONCEPTS, PSYCHOTHERAPY, AND CHILD ADJUSTMENT

Purpose: To investigate the relationship of the adjustment of the child to the family perceptions of the parents, and the changes in family views in relation to psychotherapy, child adjustment, and marital adjustment; to develop an instrument to diagnose and assess family functioning and change.
Subjects: Treatment group of clinic parents, waiting list group, nonclinic group with children high in psychological school adjustment, and nonclinic group with children low in school adjustment. Each group contains 25 to 50 families.
Methods: Treatment families are matched with families in the other three groups on basis of sex, sibling position, rank and intelligence of the child, family size, and occupational and educational level of the father. Families are tested on the Family Concept Q-sort, a marital adjustment test, a family semantic differential, and several other family and therapy measures at points similar to the beginning of treatment, at nine months, at termination, and at a six-month followup. Waiting list cases, who are retested before treatment, need at least a two-month wait after the initial test. Therapist ratings are obtained at the beginning and end of treatment, and teacher ratings and school reports are obtained at the beginning and end of treatment for the therapy group and at equivalent time points for the paired controls.
Findings: The child's adjustment is consistently related to the correspondence between the parents' concepts of the real family and a professional concept of the ideal family, the agreement between family concepts of the mother and father, and the agreement of the parents' concept of the real family and their own ideal.
Duration: June 1967-May 1970.
Investigator(s): Ferdinand van der Veen, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Cooperating group(s): Dane County Mental Health Center, Madison, Wis.; Family Service and Guidance Center, Topeka, Kan.; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JH-1 SYMPTOM STATUS PROJECT

Purpose: To review the major symptom checklists available and to construct a new one utilizing items from several existing checklists, as well as original items to cover the previously uncovered adolescent years; to evaluate the outcome of psychotherapy in terms of changes in symptomatology as reported by mothers of children who are in therapy; to analyze the natural (untreated) course of certain syndromes.
Subjects: Mothers of child guidance patients.
Methods: Comparisons will be made between the symptom scores of treated and untreated children and between pretherapy, posttherapy, and followup scores of treated children. Eventually, the effects of type and severity of symptomatology and types of treatment will also be investigated. Data will be analyzed by analysis of variance.

Duration: May 1966-May 1969.
Investigator(s): Elise E. Lessing, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: To be published in professional journal.

23-JH-2 A SYSTEM OF CORRECTIVE INTERVENTIONS IN A RESEARCH POPULATION

Purpose: An earlier study examined the influence of parental psychosis on child development. (See *Research Relating to Children*, Bull. No. 20-LJ-1.) This project attempts to study the effects of therapeutic intervention on the research sample under controlled conditions, using techniques based on the findings in the first project.
Subjects: Children of psychotic parents.
Methods: Clinical individual and group psychology, behavior therapy, and therapy directed to the amelioration of specific psychological defects and disturbances found in the course of earlier research.
Duration: September 1967-December 1971.
Investigator(s): E. James Anthony, M.D., Professor and Director, Division of Child Psychiatry, Washington University School of Medicine, St. Louis, Mo. 63110.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Plan to publish in journals of psychiatry, psychology, and social work.

23-JH-3 AN INSTRUMENT FOR PREDICTING BEHAVIOR OF CHILDREN GOING TO A SUMMER CAMP

Purpose: To construct a predictive profile that can be used in planning a more therapeutic coeducational summer camping program for emotionally disturbed children and physically handicapped children.
Subjects: Severely physically handicapped and emotionally disturbed children who attended the Boston Children's Service Association's summer camp.
Methods: Prior to a brief stay at camp, children were tested with three instruments, each of which pertains to four main areas: feelings about the physical environment, peers, authority, and major gratifications and anxieties expected under stress. The first instrument is a questionnaire filled out by the child's group leader and based on experiences in the group or with the child alone; the second is a series of 14 pictures of the actual camp with specific questions about each picture; the third is a sentence completion test of 24 items about camp. Behavioral observations were also made of each child at camp under the same four main areas. Following his stay at camp, each child was again given the picture and sentence completion tests to check the impact of actual experience on precamp fantasies.
Duration: 1967.
Investigator(s): Constance Rathbun, M.S.W., Director of Research, Robert J. Paradise, M.S.S.A., Director of Camp Services, and Edleff Schwaab, Ph.D., Clinical Psychological Consultant, Boston Children's Service Association, 3 Walnut St., Boston, Mass. 02108.

23-JH-4 MODELING AND TANGIBLE REWARDS IN CHILD GROUP THERAPY

Purpose: To conduct a clinical-experimental study of certain types of group play therapy in which a maximum number of relevant variables are controlled; specifically, to develop prosocial behaviors in socially

maladjusted boys by applying the techniques of modeling and positive reinforcement in the treatment; to evaluate the impact of the therapist.
Subjects: 96 second, third, and fourth grade boys from the Pasadena School District referred by their teachers as being shy, anxious, and withdrawn.
Methods: Four fourth grade boys from the LaCanada Unified School District and identified by their teachers and principals as the best liked by their peers and the most outgoing, bright, and socially attractive, were used as models in developing 20 five-minute videotapes in which they played and acted out various behavioral themes. Tapes began with a low level of assertiveness and social interaction and progressed to higher levels. Forty-eight children will be recruited in the fall of 1968 and 1969 and assigned at random to six treatment combinations: (1) modeling tapes alone, (2) modeling tapes plus therapist, (3) modeling tapes, plus therapist, plus positive reinforcement, (4) therapist alone, (5) therapist plus positive reinforcement, and (6) no modeling tapes, no therapist, and no positive reinforcement. Each group will meet for 24 sessions, and mothers will meet in guidance groups. Several dependent variables will be measured by gathering data from teachers, mothers, fathers, classmates, and subjects, and from observation. Children will be followed for two years after therapy.
Duration: January 1968-December 1970.
Investigator(s): Paul W. Clement, Ph.D., Director of Clinical Training, Fuller Graduate School of Psychology, Pasadena, Calif. 91101.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Videotapes to be shown at American Psychological Association Meeting, September 1968. Publications planned in 1970; interim information available from Dr. Clement.

23-JH-5 UTILIZATION OF COMMUNITY HELPERS FOR MEETING THE PSYCHOLOGICAL AND EDUCATIONAL NEEDS OF EMOTIONALLY HANDICAPPED CHILDREN

Purpose: To demonstrate the efficacy of using community helpers in meeting the psychological and educational needs of emotionally handicapped children.
Subjects: Emotionally handicapped children selected upon recommendation of the school psychologist; control group.
Methods: Experimental and control groups were tested to determine personality adjustment, perception of interpersonal relationships, and weak areas in academic knowledge and skills; a supportive program was then drafted. Community mothers were selected as helpers and assigned to work with the children on an individual basis. Experimental and control groups were retested, and at the beginning of the following school year a representative sampling of the two groups was given a final evaluation.
Duration: July 1966-July 1968.
Investigator(s): Donald C. Smith, Ph.D., Department of Psychology, Ohio State University, Columbus, Ohio 43210.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-JH-6 PHARMACOTHERAPY OF HYPERACTIVE CHILDREN

Purpose: To compare the effectiveness of various commonly used drugs on hyperactivity in children; to study the effects of medications on many indices of learning.

Subjects: 400 hyperactive boys, ages 6 to 10, from inner city schools.
Methods: In a double blind technique, five groups of 80 boys each are being treated with dextro-amphetamine, diphenylhydantoin, chlorpromazine, hydroxyzine, and placebo. Improvement will be measured clinically through interviews and classroom behavior ratings, and by a variety of psychological evaluations of learning acquisition, distractibility, and hyperactivity.
Duration: January 1968-December 1970.
Investigator(s): Lawrence M. Greenberg, M.D., Director, Psychopharmacology Service Center, and Reginald S. Lourie, M.D., Medical Director, Department of Psychiatry, Children's Hospital, Washington, D. C. 20008.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JI-1 ADOLESCENT REHABILITATION PROGRAM

Purpose: To treat adolescent patients at the Hawthornden State Hospital by placing them in a highly structured therapy program.
Subjects: Emotionally disturbed adolescents.
Methods: Program includes an accredited school program and a dormitory situation structured through implementation of the learning theory based on the privilege and demerit system. When subjects manifest desirable behavior, they are given chips which may be used to obtain extra candies or foods. Pink warning slips are given for undesirable behavior. Students are provided with an opportunity to control and direct their own behavior. Effectiveness of program will be evaluated through subjective and objective means, such as periodic administration of personality and scholastic achievement tests which will measure changes brought about by modification of the environment through psychotherapy and drug therapy.
Duration: Not reported-1970.
Investigator(s): Donald J. Kellon, M.D., Superintendent, Ellen Diss, M.S.W., Psychiatric Social Worker, E. Barker, M.A., Psychologist, and staff, Hawthornden State Hospital, Box 305, Northfield, Ohio 44067.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JI-2 PEDIATRIC PSYCHIATRIC INPATIENTS IN A GENERAL PEDIATRIC HOSPITAL

Purpose: To integrate psychiatric and nonpsychiatric patients, with pediatricians, pediatric residents, and psychiatrists working together; to train nonpsychiatric physicians and staff to be sensitive to emotional disorders.
Subjects: All psychiatric inpatients, especially acute cases.
Methods: Patients are integrated on the wards and utilize the same facilities, such as playroom, volunteer services, dining room, etc. There is continued training of physicians, nurses, volunteers, practical nurses, aides, and administrators. All children are subject to pediatric, psychiatric, neurological, endocrine, and education evaluation.
Duration: September 1966-indefinite.
Investigator(s): Alvin Friedland, M.D., Director, Pediatric Psychiatry, O. Haller, M.D., M. Prystowski, M.D., and J. Schwartz, M.D., Pediatricians, Babies Hospital, Newark, N. J. 07107.
Publications: Publication planned.

23-JI-3 EXTENSION OF SERVICES TO CHILDREN AND YOUTH

Purpose: To improve the effectiveness of an intensive inpatient program at Central State Hospital from initial referral through treatment, follow-up planning, and placement; to demonstrate the efficacy of early diagnosis and intensive treatment in the care of the child and adolescent.
Subjects: Mentally ill children, ages 4 to 18.
Methods: Coordination of the Adolescent and Children Programs in both living facilities and activities; increase in services through a day care program for children who live close enough to the hospital to commute daily; enhancement of the program with participation of students in all disciplines.
Duration: 1965-August 1968.
Investigator(s): Ray H. Hayes, M.D., Superintendent, David Irigoyen, M.D., Chief, Medical Service, and Joan Williams, Psychologist, Central State Hospital, State Department of Mental Health, Louisville, Ky. 40223.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JI-4 ADOLESCENT UNIT DEVELOPMENT PROGRAM

Purpose: To determine the posthospital educational, social, and vocational adjustment of former patients on the Adolescent Treatment Unit of the North Dakota State Hospital.
Subjects: 57 patients under age 18 released from the State Hospital during the calendar year 1965.
Methods: Questionnaires are sent to schools, county welfare offices, and juvenile commissioners concerning their contact with or knowledge of the former patients. County public health nurses visit the families and fill out a questionnaire. Additional information is sought from community mental health centers, correctional institutions, etc.
Duration: January 1968-January 1969.
Investigator(s): Walter F. Steinman, Ph.D., Chief of Psychological Services, and W. Krentz, M.S.W., Social Worker, Adolescent Treatment Unit, North Dakota State Hospital, Jamestown, N. D. 58401.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JI-5 EDUCATION PROGRAM FOR 16- TO 20-YEAR-OLDS

Purpose: To provide a formal education program for adolescents in a state mental hospital.
Subjects: 50 patients, ages 16 to 20, at Creedmoor State Hospital.
Methods: Subjects attend a school on the hospital grounds staffed by five teachers, a psychologist, psychiatrist, social worker, and stenographer. Program is geared to the individual needs of the patients and staffed by personnel alert to the special teaching problems of adolescent mental patients. It is expected that the program will allow some patients to get high school equivalency diplomas, enabling them to get better employment or to continue their education following release from the hospital; for others it will give basic reading, writing, and mathematical skills providing for prevocational education.
Duration: September 1967-September 1970.
Investigator(s): Harry A. LaBurt, M.D., and Morton B. Wallach, M.D., Psychiatrists, Creedmoor State Hospital, Queens Village, N. Y. 11427.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-JI-6 AN ADOLESCENT CONSULTATION SERVICE IN A STATE MENTAL HOSPITAL

Purpose: To evaluate the Adolescent Service in its clinical operations.
Subjects: 50 adolescents, ages 16 to 18, admitted consecutively to Boston State Hospital beginning October 1967.
Methods: Evaluation, by a variety of techniques, of the Adolescent Service consultation and central facilities programs, and intensive clinical analysis of individual cases.
Findings: Initial research has established the feasibility of a consultation and central facilities approach for the treatment of adolescent patients in a state hospital.
Duration: January 1967-December 1970.
Investigator(s): Anton O. Kris, M.D., Director, and Lawrence F. Schiff, Ph.D., Associate Director, Adolescent Service, Boston State Hospital, Boston, Mass. 02124.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Article submitted to *Archives of General Psychiatry*.

23-JI-7 A FOLLOWUP STUDY OF CHILDREN IN RESIDENTIAL TREATMENT CARE

Purpose: To evaluate the usefulness of residential treatment of emotionally disturbed children.
Subjects: 42 children discharged from residential treatment centers between January 1, 1958 and December 31, 1967.
Methods: Review of case records; conferences with agencies providing followup care; personal interviews and correspondence with those no longer in contact with agencies.
Findings: Median age of entrance into residential treatment was 14 years for both boys and girls. Antisocial behavior was the principal reason for admission. Median length of stay in residential treatment was three years for boys and two-and-one-half years for girls.
Duration: August 1968-February 1969.
Investigator(s): Viola W. Weiss, M.S.S.A., Director, Community Services, and Sanford Weiss, M.S.S.A., Executive Director, Jewish Children's Home Service, 5342 St. Charles Ave., New Orleans, La. 70115.
Publications: Mimeographed reports will be available after March 1969.

Socially Deviant

Note: Some of the following delinquency studies were taken from the section "Current Projects", in *Crime and Delinquency Abstracts*, Vol. 4, No. 3, and Vol. 5, Nos. 1 and 7. This publication is prepared by the National Clearinghouse for Mental Health Information of the National Institute of Mental Health (5454 Wisconsin Ave., Chevy Chase, Md. 20203) from material provided by the National Council on Crime and Delinquency (44 E. 23rd St., New York, N. Y. 10010). The studies are noted: (Reported by NCCD.)

23-KA-1 STUDY OF RECIDIVISM OF UNMARRIED PREGNANT GIRLS

Subjects: Negro girls under age 18 living in San Francisco who had a first child delivered out of wedlock in the years 1959-1962.
Methods: Birth records will be used to identify subjects; their present addresses will be obtained through vital statistics, hospital and agency records, etc. Interviews are conducted with each girl in which information is obtained about her reproductive history subsequent to the first pregnancy, socioeconomic factors, knowledge and utilization of family planning and medical care, vocational training, education, and employment.
Duration: January-December 1968.
Investigator(s): Helen M. Wallace, M.D., M.P.H., Professor of Maternal and Child Health, University of California School of Public Health, Berkeley, Calif. 94720.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, Welfare.

23-KC-1 DELINQUENT SUBCULTURES OF PHILADELPHIA: A SOCIOLOGICAL INVESTIGATION OF 312 DEVIANT GANGS AND GROUPS

Purpose: To examine the patterns of delinquency in organized juvenile gangs as compared to juvenile groups; to analyze a number of theoretical propositions pertaining to the delinquent subculture.
Subjects: 312 gang and group events investigated by the Philadelphia Gang Control Unit from July 1, 1965 to June 30, 1966; 1,858 prior police contacts incurred by 374 gang and group offenders.
Methods: The 312 gang and group events were compared on the basis of police reports for content of offense, aggregative characteristics of offenders, characteristics of victims, and response elicited from community. The 374 gang and group offenders were analyzed year by year beginning with age seven to determine the precise age at which offenders begin to actively participate in gangs and the age at which they desist from gang activity. The age-specific analysis includes an examination of the delinquent careers of a 16-year-old group and gang age cohort.
Findings: Gangs engage primarily in violent and at the same time more serious delinquent behavior than groups, and strong offender-victim relationships emerge for gangs. Group victims are random and diffuse. Delinquent patterns characterizing gang and group offenders are identical to age 14, where they begin to diverge. The age of onset of delinquency

is the same for "all offenses" and various offense categories for both gang and group offenders.
Duration: September 1966-April 1968.
Investigator(s): Bernard Cohen, Ph.D., 55-25 98th Pl., Rego Park, N. Y. 11368.
Cooperating group(s): University of Pennsylvania, Philadelphia, Pa. 19104.

23-KC-2 CHILD AND YOUTH SERVICES PLANNING PROJECT

Purpose: To obtain information needed for long-range planning of services to youth in Colorado, especially those who are delinquent, predelinquent, and in need of services.
Subjects: All relevant agencies in counties with urban population.
Methods: Structured interviews were held with free response items organized according to a logical model of agency structure and function.
Findings: A variety of needs for staff and programs exist now and will rise steadily through 1980.
Duration: June 1967-June 1968.
Investigator(s): Desmond S. Cartwright, Ph.D., Professor of Psychology, University of Colorado, Boulder, Colo. 80302.
Cooperating group(s): Youth Services Division, Colorado Department of Institutions; National Council on Crime and Delinquency; Office of Juvenile Delinquency and Youth Development, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Final report, 1968, available from Division of Youth Services, Department of Institutions, Box 206, Fort Logan, Colo. 80115.

23-KD-1 AN INVESTIGATION OF A SCALE TO PREDICT POTENTIAL DELINQUENTS, USING THE SCHOOL INTEREST INVENTORY

Purpose: To attempt to identify items of the School Interest Inventory which will permit classification and counseling of potential delinquents before the occurrence of actual delinquent encounters with the law.
Subjects: Groups of 200 matched delinquents and nondelinquents, boys and girls, ages 12 to 17, from each of the states Massachusetts, Rhode Island, and Connecticut.
Methods: The School Interest Inventory is administered to all subjects. Those items of the SII which differentiate delinquents from nondelinquents are identified by item analysis and phi coefficients. Scale will be validated by comparison with data derived from another group.
Findings: Studies in Kansas indicate that delinquent boys can be identified. Their responses resemble those of girl dropouts and girls in general more than they resemble responses of boy dropouts or boys in general.
Duration: March 1968-March 1969.
Investigator(s): William C. Cottle, Ed.D., Professor of Education, and Director, Counselor Education and Counseling Psychology Program, Boston College, Chestnut Hill, Mass. 02167.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-KD-2 PREDICTING THE BEHAVIOR OF ADJUDGED DELINQUENTS

Purpose: To identify, at the time of their initial adjudication by a juvenile court, those youngsters who are most likely to reappear as recidivists.

Subjects: 2,000 juveniles to age 16 from Baltimore City, and 1,000 juveniles to age 18 from Baltimore County, all adjudicated delinquent for the first time between June 1967 and May 1969.
Methods: Demographic, social, familial, personal, and psychological data obtained by means of a questionnaire and group testing will be analyzed by a linear regression equation to determine whether these data can discriminate between recidivists and nonrecidivists. Original sample will be divided into experimental and cross-validation groups, and findings derived from the experimental group will be applied to the cross-validation group. Subjects will be followed for two to four years to determine their proneness to recidivism.
Duration: June 1967-May 1971.
Investigator(s): George Lassen, Ph.D., Court Psychologist, Circuit Court for Baltimore County, Towson, Md. 21204.
Cooperating group(s): Friends of Psychiatric Research.
Publications: Initial findings to be submitted for publication at the end of 1968.

23-KD-3 PROJECT "ESCAPE TEST"

Purpose: To locate escape-prone inmates in a youth prison.
Subjects: 413 inmates of a youth prison received between May 1956 and May 1959.
Methods: A simple picture test is administered to the boys. Information about escapes is being collected, together with data on social background, previous and present criminality, course of stay in youth prison, and course of supervision period after release on parole. Recidivism within five years of release is checked through examination of the central police register.
Duration: May 1956-continuing.
Investigator(s): Jan Kaarsen, Research Associate, Institute of Criminal Science, University of Copenhagen, Copenhagen, Denmark. (Reported by NCCD.)
Cooperating group(s): Danish State Research Foundation.

23-KD-4 A COMPARISON OF YOUTHS WITH BEHAVIOR AND ADJUSTMENT DIFFICULTIES

Purpose: To discover whether clusters of symptoms and background factors are present among children with behavior and adjustment difficulties, clearly discriminating between diagnostic groupings; to compare youths who received treatment with those who did not.
Subjects: Youths, ages 12 to 18, having behavior and adjustment difficulties, including asociality and criminality. Diagnostically, group includes psychoses, neuroses, organic diseases of the brain, and various kinds of deviant behavior.
Methods: Psychiatric, psychological, and social study, with followup.
Duration: November 1965-indefinite.
Investigator(s): Per Nyhus, M.D., Chief Physician, Government Centre for Child and Youth Psychiatry, Boks 26, Vinderen, Norway. (Reported by NCCD.)

23-KD-5 SELF-REPORTING AS A PROGNOSTIC INDICATOR IN JUVENILE DELINQUENCY

Purpose: To determine clusters of behaviors affecting past involvement in crime and delinquency which will be predictive of case outcome.
Subjects: 200 consecutive male adolescents held for adjudication in the Juvenile Court of the District of Columbia.

Methods: Court workers administer a self-reporting instrument to the boys, and responses are factor analyzed. Actual disposition of the case and the projected evaluation of it made by the court workers will be used as criteria.
Duration: Continuing.
Investigator(s): Simon Dinitz, Ph.D., and Walter Reckless, Ph.D., Professors of Sociology, Ohio State University, Columbus, Ohio 43210. (Reported by NCCD.)

23-KD-6 PREDICTION OF RECIDIVISM

Purpose: To determine whether it is possible at the time of first court appearance to discriminate between those children who will commit serious crimes in adulthood and those who are likely to be minor offenders or nonoffenders.
Subjects: The 500 juvenile delinquents studied in Unraveling Juvenile Delinquency and followed up in Delinquents and Nondelinquents in Perspective.
Methods: Cross-classification of the basic data in the first study and of certain behavioral data of the followup study with a view to providing materials for constructing a discriminative predictive instrument. (The followup study indicated that 32.6 percent remained persistent offenders to age 31, 19.2 percent were minor offenders, and 48.2 percent were nonoffenders.)
Duration: January 1967-June 1968.
Investigator(s): Sheldon Glueck, Ph.D., LL.D., Roscoe Pound Professor of Law, Emeritus, and Director, and Eleanor T. Glueck, Ed.D., Research Associate and Codirector, Special Research Project, Harvard Law School, Cambridge, Mass. 02138.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Findings may be included in Toward a Clinical Typology of Delinquents, in preparation, 1968.

23-KD-7 CLINICAL AND COMMUNITY STUDIES OF JUVENILE DELINQUENCY

Purpose: To devise a classification of juvenile court first offenders in order that two classes could be defined in a fashion allowing for computer classification; one class had a "good" prognosis or prediction, and the other, a "poor" prognosis, considering probability of return to court.
Subjects: Random sample of 134 juvenile court first offenders in a community of 50,000 to 100,000 population, rated on specially devised measuring schedules tested for reliability. Sample not given intervention at time of first offense. Followup done one and one-half years later to determine who had returned to court.
Methods: Total sample was stratified by outcome (recidivist vs. nonrecidivist) and by area of residence, then randomly divided into two subsamples (a "learn" and "test" series). Individual items on each schedule that statistically (p .05) showed differences between recidivist and nonrecidivist on the "learn" studies and could be cross-validated on the "test" series were used for a computer classification procedure. Items tested in this manner came from a Rorschach rating schedule, social data schedule, physical health data schedule, group interaction data schedule, social work (parental coping) data schedule, and psychiatric data schedule. Only the psychiatric (diagnostic interview) data schedule was found to have better than chance discriminatory power using this cross-validation

technique. A pattern recognition technique was used allowing a syndrome of characteristics (nearly all drawn from the psychiatric schedule) to be used to machine-classify all first offenders (N=95) and all recidivists (N=39) on total sample.
Findings: Results showed a 63 percent accuracy in classification of recidivists and an 81 percent accuracy in classification of nonrecidivists. With this computer classification system one needs only 51 first offenders to expect 30 future recidivists. The cost of evaluating a delinquency prevention program using this outcome variable could be reduced by 50 percent, since, without the system it would be necessary to select 100 first offenders at random in order to expect 30 future recidivists in 1.5 years. Subjective global judgments of child psychiatrists have greater discriminatory value than do objective factors in identifying the persisting delinquent. Lower social class status exerts its major influence on the future persisting delinquent before he first comes to court.
Duration: 1959-1968.
Investigator(s): B. R. Hutcheson, M.D., Director of Mental Hygiene, Massachusetts Department of Mental Health, 15 Ashburton Place, Boston 02108, and Assistant Clinical Professor of Psychiatry, Harvard Medical School, Boston, Mass. 02115.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: The British Journal of Criminology 6:4:354-363, October 1966; American Journal of Public Health 53:3:418-424, March 1963; American Journal of Orthopsychiatry 33:3:397-398, April 1963.

23-KJ-1 SOURCE REFERRAL TO THE JUVENILE COURT: ITS RELATIONSHIP TO PERCEPTIONS OF PARENTHOOD AND CRISIS

Purpose: To investigate the relationship between source of referral to the juvenile court and perceptions of parenthood and crisis impact; specifically, to determine if source of referral is related to family attitudes that would help in understanding and working with juvenile delinquents.
Subjects: 66 mothers of charged delinquents, including 40 police referrals, 12 school referrals, and 14 parent referrals.
Methods: Subjects were interviewed immediately prior to their child's court hearing; questionnaire included an inventory of social characteristics, Duvall's instrument for measuring conceptions of parenthood, and Farber's Scale of Initial Emotional Impact for testing degree of crisis.
Findings: Source of referral was shown to be important as a differentiation factor in understanding the mothers in terms of their perceptions of parenthood and the impact of court experience. Differential degrees of parental participation and involvement in the court referral process were considered as significant in attempting to explain the influence of source of referral. Parent referrals represented the greatest degree of awareness and participation by the parent in the referral process.
Duration: Not reported.
Investigator(s): Harris Chaiklin, Ph.D., University of Maryland School of Social Work, Baltimore, Md. 21201.

23-KK-1 POLICE-SCHOOL CADET PROGRAM

Purpose: To classify predelinquents using a typology which has implications for treatment; to help students acquire a more positive attitude toward the police; to reduce juvenile delinquency by early identification and utilization of community resources.

Subjects: All fifth grade students from two middle class and two lower class Flint, Mich. elementary schools; group of 100 predelinquent upper elementary children.
Methods: Group of 100 students participate in police-oriented club activities designed to help them develop a more realistic concept of the policeman. An attitude-toward-police scale is administered to all fifth grade children and readministered prior to summer vacation to ascertain any change in attitude.
Duration: 1965-continuing.
Investigator(s): James W. Rutherford, Chief, Frank Rutherford, Detective Sergeant, Terrance Maxwell, Consultant, and Carl Pendell, Staff Assistant, Crime and Delinquency Prevention and Treatment, Police Department, 210 E. Fifth St., Flint, Mich. 48502.

23-KK-2 THE ADOLESCENT SOCIAL SYSTEM AS A CONTROL AGENT IN MIDDLE CLASS COMMUNITIES

Purpose: To examine the nature and dimensions of juvenile delinquency in affluent middle class communities, and to devise programs to effectively control and prevent such delinquency through the direct involvement of youth in decisionmaking activities which focus upon youth.
Subjects: Youth from two middle class San Francisco Bay Area communities.
Methods: A youth commission was established in each of the two communities in which youth played an active role in the design, implementation, and operation of programs as members of the organizations with rights and voting privileges equal to adults. Over 40 separate programs were initiated, ranging from long-range continuing policymaking groups to short-range one-day programs. All were related to the central theme of increasing the community's capacity to absorb its own delinquency through a redefinition of deviance on the part of adults, the development of awareness in the community of the problems of youth, and involvement of youth with adults in decisionmaking. One unique program of police-youth discussion groups was designed to produce mutual understanding between police and probation officers and youth referred from the probation department who had been adjudicated delinquent by the local juvenile court. The program focused on the problem-oriented segment of the youth population rather than the generality of young persons. Other activities centered around Big Brother programs, vocational testing, career development, theatre, newspapers, athletic and recreational programs, personality development, sex education, and a drug seminar, among others.
Findings: Data reflect a law enforcement level absorption of between 70 and 80 percent, with both communities experiencing some increase in absorption at the police level. The most effective programs involved shared responsibility of adults and youth, while the least effective had either adult or youth control. It appears that any segment of the youthful community can be addressed by programs relevant to its membership once it has been accurately identified and its total configuration established. Thus far, both youth councils have been continued with local funds, direction, and effort.
Duration: June 1966-January 1968.
Investigator(s): Joseph D. Lohman, M.A. (deceased), Dean, School of Criminology, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Office of Juvenile Delinquency and Youth Development, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Middle-Class Delinquency: An Experiment in Community Control. Berkeley: School of Criminology, University of California, April 1968.

23-KP-1 SIMBAD (SIMULATION AS A BASIS FOR SOCIAL AGENTS DECISIONS)

Purpose: To introduce new knowledge and technology into the practice of probation.
Subjects: Data on 2,290 juveniles referred to eight Southern California probation departments in October and November 1963; 10 percent of the current caseloads of the cooperating departments.
Methods: Participating departments will have remote, real time access to a large-scale computer facility which will provide probability estimates of success for disposition and treatment decisions at any point in the process, with the objective of effecting a true process of change by the automatic updating, incrementing, and evaluating features of the system. Two basic mathematical models, based on data from past research on the juveniles, will be developed. The first will produce the probabilities of success, based on the likelihood of recidivism, associated with different paths through the probation process; the second will produce probabilities to indicate which alternative is most likely to be selected. Initial levels of congruence between these two models will be established to serve as the baseline measure of the impact of the program. Auxiliary models will be developed to meet special needs of probation departments.
Duration: April 1967-March 1971.
Investigator(s): Alexander W. McEachern, M.A., Director, and E. M. Taylor, M.A., Codirector, Youth Studies Center, University of Southern California, Los Angeles, Calif. 90007.
Cooperating group(s): System Development Corporation; Ford Foundation; Office of Law Enforcement Assistance, U. S. Department of Justice.
Publications: American Behavioral Scientist 11:3, January-February 1968.

23-KP-2 LEGAL SERVICES TO YOUTH

Purpose: To describe and evaluate legal services to youth in Chicago.
Subjects: Negro boys under age 17, and girls under 18.
Methods: Anthropological, experimental, and ethnographic.
Duration: September 1966-September 1968.
Investigator(s): Anthony Platt, D.Crim., Research Fellow, University of Chicago Law School, Chicago, Ill. 60637.
Cooperating group(s): Center for Studies in Criminal Justice, University of Chicago.
Publications: Final report to Center for Studies in Criminal Justice; monograph or various articles planned.

23-KQ-1 POSITIVE ACTION FOR YOUTH

Purpose: To provide ways and establish resources for juvenile probationers to stabilize behavioral patterns while remaining in their own environmental setting.
Subjects: Male juvenile probationers attending Flint, Mich. junior and senior high schools.
Methods: Program attempts to serve family problems through group counseling, work experience, family counseling, supportive action, and individual counseling by concerned school and social agency personnel. Academic and attitude progress is evaluated through such measurement devices as a police attitude questionnaire, youth evaluation form, and parental evaluation form.
Findings: Fifteen boys enrolled in the program in the 1966-67 school year had one police contact as compared to 28 the previous year; unexcused absences decreased from 286 to 120; times tardy remained the same; and grade average progressed from "D" to "C".

Duration: September 1966-continuing.
Investigator(s): Terrance Maxwell, Consultant, Board of Education, Flint, Mich. (Reported by NCCD.)
Cooperating group(s): Mott Program, Board of Education, Flint, Mich.

23-KR-1 A COMPARATIVE STUDY OF THE STRUCTURE OF TWO DANISH HOMES FOR YOUNG OFFENDERS

Purpose: To compare the structure of a new progressive school for girls with that of an old authoritarian school for boys.
Subjects: Boys and girls, ages 15 to 17; institution personnel.
Methods: A questionnaire was administered to pupils and personnel, and interviews were repeated at intervals to include the time dimension. Data were collected on (1) relationship between different groups of pupils, pupils and personnel, and different groups of personnel; (2) possible value conflicts between various groups; (3) differences in value conflicts in the two types of schools; (4) value differences between a boys' and a girls' school; and (5) value differences in a new and old institution.
Duration: 1965-December 1967.
Investigator(s): Britt-Mari Persson Blegvad, Research Associate, and Asger Hansen, Strandvej 95, O, Copenhagen, Denmark. (Reported by NCCD.)

23-KR-2 RESEARCH ON CONTROLLED ALLOCATION OF BOYS TO BORSTAL INSTITUTIONS WITH DIFFERING TREATMENT EMPHASIS

Purpose: To determine the effect of interaction between three borstal institutions and a variety of psychosociological data on reconviction rate of delinquent boys.
Subjects: Boys committed to a borstal institution by the court.
Methods: The three borstals are small and open; the first emphasizes casework, the second, hard and purposeful work, and the third is oriented to small groups and community responsibility. Boys are first selected for a "pool" having a composite image of all three borstals; there they are intensively interviewed on the basis of a prepared schedule and given a battery of special tests. At set intervals they are randomly allocated to vacancies in the three borstals. Following release, a risk period of at least two years will be allowed before main analysis of interaction model is made through reconviction rate.
Duration: February 1964-1968.
Investigator(s): A. Straker, Chief Psychologist, Prison Department, Home Office, Romney House, Marsham St., London, S. W. 1, England. (Reported by NCCD.)

23-KS-1 THE ADULT ADJUSTMENT OF CHILDREN PLACED IN PRIVATE BOARDING SCHOOLS BY THE JUVENILE COURT: A LONGITUDINAL STUDY

Subjects: Children placed in private boarding schools by the Summit County Juvenile Court in 1953; control group of children referred to the court but not placed in boarding schools. Groups are matched with respect to I.Q., number of referrals to court, age, home address, time of referral, socioeconomic level of family, and level of education.

Methods: Rorschach and Draw-a-Person Tests are administered and results compared for changes with results of same tests given prior to boarding school placement; subjects are also given two questionnaires and are interviewed. Police and court records are being checked for information concerning adjustment since boarding school. The boarding school group is divided into successful and unsuccessful boarding school placement, and these two groups will be compared on adjustment subsequent to boarding school. Subjects and controls will be compared for later adjustment before and after age eighteen.
Duration: Not reported-1969.
Investigator(s): Norman G. Bills, Ph.D., Department of Education, University of Akron, Akron, Ohio 44304.
Cooperating group(s): Summit County Juvenile Court, Akron, Ohio 44310.

23-KS-2 JUVENILE OFFENDERS REHABILITATION PROJECT

Purpose: To investigate the influence of special modeling and identification opportunities on the behavior of adolescent delinquent boys; to evaluate hypothesis that systematic exposure to meaningful identification models can have a discernible and salutary influence on the social, vocational, and educational development of the juvenile offender.
Subjects: Small groups of institutionalized male juvenile offenders, ages 15 to 18; control groups.
Methods: Boys are systematically exposed to group leaders (models) who enact, via role-playing procedures, different situations (such as a job interview) which are determined to be of importance to the rehabilitation of the juvenile offender. The boys then imitate, practice, and discuss the various roles. Guided discussion is included, and focus is on offenders' vocational plans, motivations, and interests, social skills, attitudes toward work, and behavior having to do with school. Effects of modeling will be assessed both at the institution and by followup.
Findings: Preliminary studies have indicated significant positive changes across several dimensions of self-concept, attitudes, and overt behavior of experimental as compared to control group boys.
Duration: October 1966-October 1970.
Investigator(s): Irwin G. Sarason, Ph.D., Professor of Psychology, and Victor J. Ganzer, Ph.D., Assistant Research Professor of Psychology, University of Washington, Seattle, Wash. 98105.
Cooperating group(s): Cascadia Juvenile Reception-Diagnostic Center, State Department of Institutions; Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: American Psychologist 23:254-265, 1968.

23-KS-3 POST GANG CAREER FOLLOWUP STUDY

Purpose: To identify, by means of various measures of participation, the effect of membership in a delinquent gang upon the subsequent careers of former members; to test hypothesis that those who participated most intensely in the gang's activities would be most likely to have greater amounts of unemployment, arrests, and involvement in crime.
Subjects: Former members of a delinquent gang.
Methods: As many of the former members as possible are contacted and interviewed. Detailed data on their participation in the group are already recorded from observations made previously. Two of the more important independent variables are amount of participation and clique membership. There are also variables which assess experiences during the

intervening years, such as continuing contact with former members, residential change, attempts at schooling, source of help in getting jobs, and arrests. As dependent variables, occupational, personal, and legal adjustment will be assessed.
Findings: There are indications that those interviewed who have made the best social adjustment tend to have been high participators in the group. The distinction between good and poor social adjustment seems to depend more on clique participation.
Duration: March 1967-December 1968.
Investigator(s): Leon R. Jansyn, M.A. (Ph.D. Candidate, Southern Illinois University), Assistant Research Specialist, Department of Sociology, Rutgers, The State University, New Brunswick, N. J. 08903.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: *American Sociological Review* 31:5, October 1966.

23-KS-4 MANAGEMENT OF JUVENILE OFFENDERS AND EMOTIONALLY DISTURBED CHILDREN THROUGH AFFECT

Purpose: To test whether undirected production of any or all emotional responses could result in generalized improvement of behaviorally disordered individuals who are often characterized by constricted, inappropriate, or avoidant responses.
Subjects: Male and female juveniles and older hospitalized female psychotics; control groups.
Methods: Conditioning technique utilizing aversive stimuli (constant but increasing electric shock which is relieved on production of any new answer to a simple question); physical manipulation of musculature; and mass routines of eurythmics and directed breathing and emotive exercises.
Duration: Not reported-1970.
Investigator(s): Douglas A. Quirk, M.A., Senior Psychologist, Clark Institute of Psychiatry, 250 College St., Toronto, Ontario, Canada.

23-KS-5 EFFECTS OF DESENSITIZATION THROUGH RECIPROCAL INHIBITION OF SELECTED ANXIETY SYSTEMS IN BEHAVIORALLY DISORDERED CHILDREN

Purpose: To test the feasibility of large group or mass treatment procedure on school performance and delinquent behavior.
Subjects: Boys and girls, ages 12 to 18; control groups.
Methods: Motion picture films depicting hierarchies of visual stimuli commonly associated with anxiety arousal are presented to the subjects in a group, varying accompanying auditory and visual aversive and conditioned relief stimuli. Using a desensitizing procedure (conventional, inverted, and mixed), without artificially induced responses in the subjects, attempts will be made to suppress anxiety reactions to the presented stimuli. Effectiveness of the procedure will be assessed in terms of school performance, school behavior, and observed delinquent behavior. Control groups receive no treatment, psychotherapy, or inverted hierarchy groups.
Duration: Not reported-1970.
Investigator(s): Douglas A. Quirk, M.A., Senior Psychologist, Clark Institute of Psychiatry, 250 College St., Toronto, Ontario, Canada.

23-KS-6 SOME MEASURES OF EGO STRENGTH AND SELF-CONCEPT BEFORE AND AFTER PLASTIC RECONSTRUCTIVE SURGERY

Purpose: To evaluate effects of plastic surgery upon ego strength and self-concept of juvenile delinquents.
Subjects: Male and female juvenile delinquents, ages 12 to 18, in need of plastic reconstruction; neither psychotic nor functioning with an I.Q. of less than 80.
Methods: The H-T-P, MMPI, Bender-Gestalt, and Black's Adjective Check-list are administered one week prior to surgery and six weeks following completion of surgical procedure.
Findings: Preliminary findings indicate statistically significant changes in ego strength and self-concept formation following plastic reconstructive surgery.
Duration: September 1964-September 1968.
Investigator(s): Robert S. Jones, Psychologist, Leo Munick, Jack Longacre, and Robert Wood, Hamilton County Juvenile Court, 2020 Auburn Ave., Cincinnati, Ohio. (Reported by NCCD.)
Cooperating group(s): Christ Hospital, Cincinnati.

23-KS-7 DEVELOPMENT OF EDUCATIONAL AND TREATMENT ATTITUDES IN STAFF IN A PROTOTYPE INSTITUTION FOR MALADJUSTED YOUTH

Purpose: To measure the influence of counseling by the professional team of the Institute for Criminology on the changes in staff attitudes and on the working and professional dynamics of the staff of an institution for maladjusted youth.
Subjects: Inmates of the institution, boys ages 15 to 18, and staff.
Methods: Staff members are selected through various tests and interviews. They attend seminars, have practice in other institutions, and receive group and individual counseling. At regular intervals, attitudes of staff and inmates are measured. All events are well documented.
Duration: August 1967-February 1972.
Investigator(s): Katja Vodopivec, LL.D., Scientific Counselor and Director, Vinko Skalar, Psychologist and Collaborator, and Bronislav Skaberne, LL.D., Higher Scientific Collaborator, Institute for Criminology, Faculty of Law; Milica Bergant, Ph.D., Pedagogist and Professor, Faculty of Philosophy; and Milos Kobal, Psychiatrist and Lecturer, Faculties of Law and Medicine, University of Ljubljana, Ljubljana, Yugoslavia.
Cooperating group(s): Research Fund Boris Kidric, and Department of Health and Welfare, S. R. Slovenia; Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication planned in December 1972.

THE CHILD IN THE FAMILY

Family Relations

23-LA-1 FAMILY SIZE, CHILDSPACING, AND SOCIOECONOMIC STATUS

Purpose: This is the fourth phase of a longitudinal study of 1,300 Detroit area couples at varying stages in the family growth cycle. (See Research Relating to Children, Bull. Nos. 18-U-1 and 20-LG-1.) This phase attempts to determine changes in family expectations and pregnancy history, as well as shifts in economic situation, and tests some of the hypotheses explored in earlier phases of the study.
Subjects: 94 percent of the 1,300 white, married Detroit Metropolitan women initially interviewed in 1962 and still eligible for the study; a cross-section sample of 3,350 Detroit couples married in 1961 for whom premarital pregnancy status was ascertained; two national samples from 1955 and 1961 Growth of American Families data.
Methods: The original sample was interviewed for the fourth time in the Fall of 1966 with regard to pregnancy histories, spacing of children, and an array of social and economic characteristics. Multivariate analysis will emphasize the social and economic correlates of varying childspacing patterns.
Duration: June 1966-May 1969.
Investigator(s): Ronald Freedman, Ph.D., Director, and Lolagene Coombs, M.A., Research Associate, Population Studies Center, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Social Security Administration, U. S. Department of Health, Education, and Welfare.
Publications: A number of publications are planned as the research progresses.

23-LA-2 FAMILY STRUCTURE, PARENT CHARACTERISTICS, AND CHILD PERSONALITY

Purpose: To investigate the relationships between parental acceptance of the child and each of several child characteristics; to investigate the effects of family structure, family communication patterns, socioeconomic status, and sex, birth order, and I.Q. of the child upon these relationships.
Subjects: 64 children drawn at random from the three main Topeka high schools according to the following criteria: ages 15 to 16, evenly divided with regard to sex and birth order, of middle class families with both parents living in the home, and school I.Q. between 100 and 119; their families.
Methods: Parents are interviewed, children are given a variety of tests, and the Revealed Differences Technique is used to obtain data on family interaction patterns.
Duration: October 1967-June 1973.
Investigator(s): Alfred F. Glixman, Ph.D., Senior Research Psychologist, The Menninger Foundation, Box 829, Topeka, Kan. 66601.

23-LA-3 FAMILY FACTORS AND EMOTIONAL ADJUSTMENT PATTERNS IN DISADVANTAGED MEXICAN-AMERICAN CHILDREN

Purpose: To investigate family variables, such as role perception and childrearing attitudes, associated with children identified as high or low in adjustment, and language variables; specifically, to develop a solid descriptive base for use in designing an action program.
Subjects: 150 lower class Mexican-American children; families of 30 of them.
Methods: All of the children were rated by teachers on behavior and language functioning. The families of 30 children with extreme ratings were administered semantic differentials, childrearing attitude scales, and a social data instrument. Children were rerated for behavior after eight weeks to test the reliability of the rating.
Findings: There appears to be a strong positive correlation between language functioning and behavior rating. Rating scale appears reliable.
Duration: June-November 1968.
Investigator(s): James M. Stedman, Ph.D., Coordinator of Research and Inservice Training, Community Guidance Center, and Richard E. McKenzie, Ph.D., Chief of Behavioral Assessment, School of Aerospace Medicine, and Staff Psychologist, Community Guidance Center, 2135 Babcock Rd., San Antonio, Tex. 78229.
Cooperating group(s): Dr. Grover Cunningham and staff, Child Development, Evaluation, and Research Institute of the Southwest, University of Texas, Austin, Tex.
Publications: Publication planned.

23-LA-4 FAMILY PATTERNS RESEARCH: STUDY OF FAMILY INTERACTION AND DECISIONMAKING PROCESSES

Purpose: To study the differing interaction patterns, decisionmaking processes, and problem-solving modes of families having children with (1) functional reading disabilities, (2) hyperaggressive behavior problems, or (3) neither of the above.
Subjects: Boys, ages 9 to 12, noninvolved psychiatrically, of average or higher I.Q., and from intact homes; their parents. Subjects are selected from public school rosters according to reading levels, behavioral ratings, etc.
Methods: Parents and son work individually, in all possible dyads, and in triads on a button-pushing task requiring solution of sequence in which buttons are pushed. Indices of accuracy, cooperation, power, flexibility, etc., are objectively derivable. Comparisons of families, fathers, mothers, sons, father-son, mother-son, and mother-father teams constitute the primary mode of analysis.
Findings: There are distinct patterns between the three types of families. Those having children with reading problems are least flexible and adaptive and show a unilateral power structure unrelated to skill, with the father more powerful than the mother, and the mother more powerful than the son. Families having a child with a behavior problem are more flexible, with the mother the most powerful. Control families are the most flexible, with the father more powerful than the mother, but surrendering power to the son.
Duration: September 1962-June 1968.
Investigator(s): Eric A. Bermann, Ph.D., Assistant Professor, Department of Psychiatry, and Staff Psychologist, Children's Psychiatric Hospital, and Daniel R. Miller, Ph.D., Professor of Psychology, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Journal article or monograph planned.

23-LC-1 FAMILY SIZE AND ACADEMIC ACHIEVEMENT

Purpose: To study the effects of family size on academic achievement.
Subjects: 302 upper-middle class seventh and eighth grade children, 155 boys and 147 girls.
Methods: Analyses of variance and covariance will be performed using academic achievement (both grade point averages and achievement test scores) as the dependent variable and family size as the independent variable.
Duration: June 1967-June 1968.
Investigator(s): Mark Oberlander, Ph.D., Research Analyst, and Noel Jenkin, Ph.D., Director of Research, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: To be published in professional journals.

23-LC-2 MILITARY PSYCHIATRY: IMPACT OF FATHER ABSENCE ON PERSONALITY FACTORS OF CHILDREN

Purpose: To study effects of programmed career-relevant father/husband absence on psychosocial development of five- to eight-year-old boys, maternal coping methods, and family roles and relationship to the community; to examine the process of reintegration of the returning father and the elements influencing persistence of any change observed.
Subjects: Career military families.
Methods: Parents are interviewed and broad-range questionnaires and objective psychological scales are administered. Children are evaluated through projective testing and teachers' ratings.
Findings: There is a variability of coping styles, some enduring family role changes, and a suggested hiatus in psychosocial development.
Duration: 1963-1970.
Investigator(s): Colonel Stewart L. Baker, M.D., Chief, Department of Psychiatry and Neurology, and Major Laurence A. Cove, M.D., Assistant Chief, Child Psychiatry Service, Department of Psychiatry and Neurology, Walter Reed General Hospital, Walter Reed Army Medical Center, Washington, D. C. 20012.
Cooperating group(s): Medical Research and Development Command, Office of the Surgeon General, Department of the Army, U. S. Department of Defense.
Publications: Papers presented at annual meetings of the American Orthopsychiatric Association, March 1968 and March 1967, and the American Psychological Association, September 1967; available from Dr. Baker.

23-LC-3 PARENTAL EXPERIENCES OF UNWED MOTHERS WHOSE FIRST OUT-OF-WEDLOCK CHILD IS NEAR SCHOOL AGE

Purpose: To update information on the situation of women who kept their first out-of-wedlock child now that this child is about to enter school.
Subjects: As many as possible of the 321 unwed mothers originally seen at time of confinement in a randomly selected group of New York City hospitals. (See Research Relating to Children, Bull. No. 16-Y-30.)
Methods: A semistructured questionnaire is used for field interviews conducted by experienced social workers. The content of the interview will deal with housing, living arrangements, employment and other sources of support, arrangements for child care, subsequent marriages and pregnancies, contacts with the child's father, etc. In addition, mothers are questioned about the child's current and past whereabouts, person or persons primarily responsible for child's care, general health status,

and development and behavior. Most responses are recorded verbatim, with much of data coded and punched for electronic data processing and analysis.

Duration: March 1968-Spring 1969.

Investigator(s): Mignon Sauber, M.A., Director, and Eileen M. Corrigan, M.S.W., Senior Research Associate, Research Department, Community Council of Greater New York, 225 Park Avenue S., New York, N. Y. 10003.

Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

Publications: Experiences of the Unwed Mother as a Parent, Mignon Sauber and Elaine Rubinstein. New York: Community Council of Greater New York, 1965; monograph to be published by Community Council of Greater New York; journal articles planned.

23-LD-1 LONGITUDINAL STUDY OF FAMILY INCOME DYNAMICS

Purpose: To develop an understanding of the factors that cause family incomes to rise above or sink below the poverty level, the impact of these changes on family attitudes and behavior, and the effect of these changes on family income.

Subjects: Initial sample of 2,000 low income families not headed by an old person; representative national sample of 3,000 families drawn by the Survey Research Center, and including people who become poor.

Methods: Interviews will be conducted for five or six years. Those in comfortable economic circumstances at the first interview will be recontacted briefly by telephone, mail, or doorstep visit to learn whether they have become poor, and if they have, they will be interviewed in full. As children leave the original families, they will become part of the sample. As individuals or families manage to climb out of poverty, they will be followed for several years to provide data on the differences between those who manage to capitalize on their gains and keep advancing and those who fall back.

Duration: Summer 1967-continuing.

Investigator(s): James N. Morgan, Ph.D., Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, Mich. 48106. (Reported by Dorcus Carrington, Assistant in Research, Survey Research Center.)

Cooperating group(s): U. S. Office of Economic Opportunity.

23-LD-2 INFLUENCE OF THE FATHER'S JOB AND SOCIAL STATUS ON THE OCCUPATIONAL AND SOCIAL GOALS OF YOUTH

Purpose: To identify specific reward patterns that divert and distract youth from attaining satisfactory vocational adjustments; to investigate the extent to which adolescent boys are motivated to identify with their fathers and to participate in youth cultural functions.

Subjects: 17-year-old boys in four different vocational orientations.

Methods: A variety of Likert-type attitude scales were developed to evaluate motivations. Boys were classified on the basis of four groupings, ranging from college preparatory to potential dropout. Multivariate procedures were employed for analysis of data.

Duration: Not reported-August 1967.

Investigator(s): Robert E. Grinder, Ed.D., Associate Professor of Educational Psychology, School of Education, University of Wisconsin, Madison, Wis. 53706.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-LF-1 EFFECT ON CHILDREN OF PARENTAL MENTAL ILLNESS

Purpose: To determine whether a developing mental illness and hospitalization of a parent has a deleterious effect on children and, if so, whether direct casework intervention with the child can ameliorate damage.
Subjects: Children of patients hospitalized at the Eastern Pennsylvania Psychiatric Institute; subjects are under age 18 and from intact families in which casework service is being provided to nonhospitalized adult members of family.
Methods: In survey phase, information is collected from adult members of family and from collaterals in order to determine the effect of parental mental illness on children. If this effect is shown to be harmful, demonstration phase will follow in which it will be determined whether direct casework intervention by means of interviews with and on behalf of the child can ameliorate deleterious effects.
Duration: Not reported-continuing.
Investigator(s): Margaret L. Shively, M.S.S., Director of Social Service, William A. Phillips, M.D., Medical Director, and William Warthling, M.S.W., Psychiatric Casework Supervisor, Eastern Pennsylvania Psychiatric Institute, Henry Ave. and Abbottsford Rd., Philadelphia, Pa. 19129.

23-LF-2 FREQUENCY, CAUSES, SOCIAL AND ECONOMIC CONSEQUENCES, AND PREVENTION OF ALCOHOLISM IN FAMILIES WITH LOW INCOME

Purpose: To develop and test methods of case finding for alcoholism in two communities in an attempt to establish a complete universe of low income families with an alcoholic; to test the validity of the case finding through the screening process by means of clinical study; to determine the actual social, economic, and psychological effects on children and family life where there is an alcoholic father; to develop conclusions as to the utility of a social survey screening process as a means of case finding of alcoholics in large population groups.
Methods: Development of rosters of low income families with problems of alcoholism in one highly developed urban and one rural community. Included are demographic analyses, plotting of low income neighborhoods, documentation of customs and social mores of the people, identification of locales and occasions for drinking behavior, and an analysis of existing records or experience of several social institutions with known contacts of alcoholic families or their children. Interview schedules are then used to obtain identifying data on family composition and characteristics and specific information from the husband and wife. Subsequent study will include clinical validation of suspected alcoholics, analysis of social screening with statistical measures of validity and reliability, and analysis of community data with relation to screening findings and clinical validation.
Duration: 1967-1969.
Investigator(s): Sroboljub Stojiljkovic, M.D., Professor of Psychiatry, University of Belgrade School of Medicine, and Momcilo Kilibarda, M.D., Social Psychiatrist, and Chief, Mental Health Department, Federal Institute of Public Health, Belgrade, Yugoslavia.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-LF-3 INTENSIVE NURSING AFTERCARE FOR PSYCHOTIC MOTHERS

Purpose: To carry out and evaluate a program of intensive aftercare with discharged psychotic mothers of young children.

Subjects: Experimental group of mothers who have been hospitalized for a psychotic disorder; one control group of psychotic mothers and one of normal mothers; children of all groups.
Methods: Visiting nurses will visit mothers in experimental group immediately prior to discharge from hospital and at frequent intervals in their homes over a two-year period afterwards. Aftercare is focused on mother's relationship with her child and deals with the various sequential issues of adaptation to the home and the psychological barriers to adaptive mothering. Assessment of aftercare program will be based on comparison of changes found in visited mothers and control groups in the areas of situational stress, maternal personality, psychopathology, attitudes and behavior, and general and specific aspects of child development and psychiatric status of the child; numerous specific areas based on observed mother-child interaction will also be considered. Further evaluation will involve the study of the intervention process and is designed to reveal information about interactional processes which do and do not lead to desired changes.
Duration: 1967-1971.
Investigator(s): Henry U. Grunebaum, M.D., and Justin L. Weiss, Ph.D., Clinical Associates in Psychiatry; David Gallant, Research Associate, Department of Obstetrics and Gynecology; Carol Hartman, Research Nurse, Harvard Medical School, Boston, Mass. 02115.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-LH-1 EARLY LIFE EXPERIENCES AND ADOPTIVE PARENTING: A FOLLOWUP STUDY

Purpose: To study the parental functioning of adoptive couples; to determine what stresses exist for them after they have legally adopted the child and agency service is terminated; to learn what resources the couples utilize in meeting the various stresspoints they experience, and what their attitudes are regarding the helpfulness of these resources.
Subjects: 444 adoptive families whose adoptions from Children's Services of Connecticut were completed between 1957 and 1965.
Methods: Each adoptive family is asked to complete a mailed self-reporting inventory. One hundred couples and their oldest adopted child between ages 5 and 12 are interviewed regarding parental functioning; parents will also complete the Hurvitz's Marital Roles Inventory.
Duration: July 1967-June 1969.
Investigator(s): Philip Starr, M.S.W., Research Department, Ruth Taft, M.S.W., Adoption Department, and Delores A. Taylor, M.S.W., Research Director, Children's Services of Connecticut, 1680 Albany Ave., Hartford, Conn. 06105.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

23-LH-2 COMMUNICATION BETWEEN MOTHER AND CHILD IN ADOPTION

Purpose: To further investigate communication patterns between mother and child concerning feelings and information about adoption through a followup study of families whose adopted child was placed by the Boston Children's Service Association.
Subjects: 55 families in which the first adopted child is now between the ages of ten and twelve.
Methods: Single semistructured interview held with each mother included questions relating to: demographic data; comparison between the type of

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child first requested and child actually placed; themes used to interpret adoption; facts given without asking; feedback questions from the child; relatives' and schools' knowledge of adoption; how background information given by agency either orally or in writing has been remembered and used; expressed anxieties about later questions or sexual acting out; and degree of integration of the adopted child into the family unit.
Duration: 1965-June 1968.
Investigator(s): Constance Rathbun, M.S.W., Director of Research, and Helen McLaughlin, Caseworker, Boston Children's Service Association, 3 Walnut St., Boston 02108; Chester Bennett, Ph.D., Professor, Department of Psychology, Boston University, Boston, Mass. 02215.
Publications: To be published in Child Welfare.

Childrearing

23-MA-1 PATTERNS OF PARENTAL AUTHORITY

Purpose: To identify current patterns of childrearing attitudes and practices concerned with authority, rationality, autonomy granting, and punitiveness; to compare contrasting clusters of parents in order to ascertain the extent to which their children differ on such attributes as achievement motivation, disruptive behavior, helpfulness to peers, independence, and leadership.
Subjects: 150 families equally divided with regard to sex of nursery school child studied, selected from among families with children over three and one-half attending a public, private, or cooperative nursery school in the Berkeley area; additional group of 100 families.
Methods: Direct observation is stressed. Each child is observed for three months in the nursery school setting, is administered a Stanford-Binet, Form L-M, and rated on a 72-item Q-sort. Parents in the 150-family group are studied intensively. They are observed, independently, in interaction with their children during two three-hour visits to the home. The mother and father are also interviewed separately, then rated by the observers on a set of scales which parallel scales from a Parent Attitude Inquiry previously completed by the parent. Parents in the 100-family group complete a self-report inquiry and their children are observed over a prolonged period in the nursery school setting.
Duration: January 1967-December 1969.
Investigator(s): Paul H. Mussen, Ph.D., Professor, and Diana Baumrind, Ph.D., Associate Specialist, Department of Psychology, University of California, Berkeley, Calif. 94720.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Findings will be reported in the usual professional journals. Some working documents, including a manual for the Preschool Behavior Q-sort, are available.

23-MB-1 CHILDREARING IN INUVIK, N. W. T.

Purpose: To study relations between Indian, Eskimo, and métis-Indian children and their adult socializers or peer caretakers in a recently established Arctic town.
Subjects: Opportunistically selected parents and children.

Methods: School records of the entire resident population of children ages 7 to 18 have been examined. Subjects are observed, informal interviews are held, and available records studied. An attempt will be made to compare childrearing practices with those in more traditional Arctic and sub-Arctic settings.
Duration: February 1967-September 1968.
Investigator(s): John J. Honigmann, Ph.D., Professor of Anthropology, and Irma Honigmann, B.A., University of North Carolina, Chapel Hill, N. C. 27515.
Cooperating group(s): Northern Coordination and Research Centre of the Department of Indian Affairs and Northern Development, Government of Canada; Institute for Research in Social Science; National Science Foundation.
Publications: Papers will be published or presented at appropriate conferences.

23-MB-2 RELATION OF LACTATION TO MATERNAL BEHAVIOR

Purpose: To study statistical relationships between lactation and certain other aspects of maternal behavior.
Subjects: 208 mothers of babies from one to two months old.
Methods: The women were asked to fill out a checklist concerning their behavior toward their infants at the time of their postpartum obstetrical visit. Thirty-eight pairs of lactating and non-lactating mothers, matched for education and parity, were formed, and data are being collected.
Findings: Breastfeeding was practiced significantly more by college-educated women. Three items of maternal behavior on the Wilcoxon Matched-Pairs Signed Rank Test indicated no significant differences between the lactating and non-lactating mothers. The fourth item, concerning sleeping and resting in the same bed with the baby, was significant.
Duration: October 1965-October 1968.
Investigator(s): Niles Newton, Ph.D., Assistant Professor, Division of Psychology, Northwestern University Medical School; and Carolyn Rawlins, M.D., Attending Obstetrician, St. Margaret Hospital, Chicago, Ill. 60611.
Cooperating group(s): John R. and Doris J. Haire Foundation.

23-MB-3 EFFECTS OF EARLY CONTACT WITH INFANT ON MATERNAL COMPETENCE

Purpose: To study the influence of separation of premature infant and mother on maternal behavior and infant growth and development.
Subjects: Intact families of premature infants living in the mid-peninsula area.
Methods: Parents are interviewed and mother-infant interaction is observed. Developmental tests are administered to infants.
Duration: January 1967-December 1971.
Investigator(s): P. Herbert Leiderman, M.D., Associate Professor of Psychiatry, School of Medicine, and Clifford R. Barnett, Ph.D., Associate Professor of Anthropology, Stanford University, Palo Alto, Calif. 94305.
Cooperating group(s): Grant Foundation; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publications planned in Fall 1968 and thereafter.

23-MB-4 CHILDREARING AND COGNITIVE DIFFERENTIATION IN CHILDREN OF LOWER SOCIOECONOMIC STATUS

Purpose: To investigate the importance of certain aspects of childrearing in relation to children's readiness for and achievement in school.
Subjects: 200 Negro kindergarten children of lower socioeconomic status; their mothers.
Methods: Children are administered three tests: Embedded Figures Test for Children (visual field dependence), Wepman Auditory Discrimination Test, and Wechsler Prekindergarten and Primary Scale of Intelligence. In addition, samples of spontaneous speech of the children will be collected in the classroom. Mothers are interviewed by Negro women using an extensive home interview schedule.
Duration: January 1967-December 1970.
Investigator(s): Martin Deutsch, Ph.D., Director, Institute for Developmental Studies, and Professor of Early Childhood Education, New York University School of Education, New York, N. Y. 10003. (Reported by Mary Eisman, Associate Research Scientist, Institute for Developmental Studies.)
Cooperating group(s): The Campus School Program, New York City Board of Education; National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Preliminary findings on the home interview will be available January 1969. A final report will be available through the Institute for Developmental Studies.

SOCIOECONOMIC AND CULTURAL FACTORS

23-NA-1 CULTURES IN CONFLICT--HOME AND SCHOOL AS SEEN THROUGH THE EYES OF LOWER CLASS STUDENTS

Purpose: To investigate the extent of subculture conflict perceived between middle class oriented public schools and low income groups; to determine what features of the home or school environment aggravate or mitigate these conflicts.
Subjects: 100 students from low income families.
Methods: Taped interviews were held, and analysis focused on conflicts of role models, values, cognitive style, and career expectations of low income groups. Results were applied to the formulation of hypotheses regarding specific problems encountered in public schools, the manner in which students cope with these problems, and ways to mitigate the home-school conflict.
Duration: February 1967-January 1968.
Investigator(s): Deborah I. Offenbacher, Ph.D., New School for Social Research, New York, N. Y. 10025.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Preliminary report available; final report planned at end of 1968.

23-NA-2 PARENT-STUDENT PROJECT

Purpose: To delineate the varying subcultures among students at Berkeley, and to investigate the links between student organizations and parental characteristics.
Subjects: 481 Berkeley students selected at random; their parents.
Methods: A two-hour interview, covering a wide range of topics, was held with 85.2 percent of the sample, and a mail questionnaire, taking about 40 minutes to complete, is being sent to the parents. Analysis of data is in progress.
Duration: January 1968-January 1969.
Investigator(s): Shirley A. Star, Ph.D., Lecturer, and Jonathan Kelley, B.A., Ph.D. Candidate, Department of Sociology, University of California, Berkeley, Calif. 94720.
Cooperating group(s): Committee on Research, University of California, Berkeley.
Publications: Book planned for 1969.

23-NA-3 A SOCIOLOGIC STUDY OF INDIGENT PRIMIGRAVID PREGNANCY

Purpose: To test the hypotheses that: (1) different patterns of behavioral and attitudinal adaptation to pregnancy exist among indigent primigravid patients both between Negro and white patients and within

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these two groups; (2) these different patterns of behavioral and attitudinal adaptation are associated with cultural and structural characteristics of the social environment; (3) the association between characteristics of the social environment and adaptation to pregnancy is mediated through intervening social psychological variables such as alienation, achievement motives, authoritarianism, and anxiety; and (4) the different patterns of behavioral and attitudinal adaptation are related to pregnancy outcome.
Subjects: 1,000 indigent primigravid patients at Grady Hospital, Atlanta, Ga.
Methods: Data collected on subjects will permit analysis of relationships between independent, intervening, and dependent variables. Independent variables will include cultural and structural characteristics of the social environment, such as social background characteristics of subjects; intervening variables will consist of social-psychological characteristics of the subjects; and dependent variables will be attitudes and practices relating to pregnancy and pregnancy outcome.
Duration: July 1968-June 1969.
Investigator(s): William L. Graves, M.A., Assistant Professor, Department of Sociology, and Associate in Medical Sociology, and Malcolm G. Freeman, M.D., Perinatal Pathologist, and Director, Reproductive Wastage Study Project, Department of Obstetrics and Gynecology, School of Medicine; John T. Doby, Ph.D., Professor and Chairman, Department of Sociology, Emory University, Atlanta, Ga. 30303.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-NB-1 GENERIC BASES OF NEGRO TEENAGE UNEMPLOYMENT: A PRELIMINARY INVESTIGATION

Purpose: To investigate the educational, psychological, familial, sociological, and situational reasons for the excessively high rate of unemployment among Negro teenage youth in rural communities; to develop a plan for further research into the problem of constructing and operating a remedial program tailored to meet the needs of these youth.
Subjects: Stratified sample of 256 out-of-school teenage youth in two adjacent rural counties in North Carolina who graduated or dropped out of high school in 1966.
Methods: Subjects are interviewed regarding their job-hunting techniques, knowledge of the job market, employment experience, aspirations, and self-images, as well as family background, education, and training. Responses given in interviews with a sample of employers and school officials will be used in an evaluation of job opportunities, community attitudes, and the adequacy of educational and training facilities available to Negro youth in the area.
Duration: July 1967-September 1968.
Investigator(s): Dr. Charles H. Rogers, Center for Occupational Education, North Carolina State University, Raleigh 27607; and Benjamin Harris, North Carolina Agricultural and Technical College, Greensboro, N. C. 27411.
Cooperating group(s): Manpower Administration, U. S. Department of Labor.

23-NB-2 LONGITUDINAL STUDY OF LABOR FORCE BEHAVIOR

Purpose. To identify and explore the interaction among economic, sociological, and psychological variables influencing work behavior and experience.
Subjects: Young men and women, ages 14 to 24, men, 45 to 59, and women, 30 to 44.

Methods: Six consecutive interviews will be held a year apart with each of the four groups. The initial interviews include extensive work histories and information which will permit construction of psychometric and sociometric profiles of the respondents. All interviews will involve in-depth questions on labor force behavior and motivation.
Duration: 1966-1975.
Investigator(s): Herbert S. Parnes, Ph.D., Center for Human Resource Research, Ohio State University, Columbus, Ohio 43210.
Cooperating group(s): Manpower Administration, U. S. Department of Labor.
Publications: Report covering the findings of the initial interviews for older and younger men planned for 1968.

23-NC-1 PERSONALITY CORRELATES OF POLITICAL AND SOCIAL ATTITUDES

Purpose: To investigate the personality correlates of political and social attitudes, with emphasis upon the correlates of attitudes about civil rights.
Subjects: Public and parochial high school students.
Methods: Samples of Negroes and whites will be compared on a scale measuring militancy of civil rights attitudes. Scores on this scale will be correlated with scores on tests of several personality traits, such as aggressiveness and self-control. The effects of various experimental techniques used to alter the degree of militancy expressed by subject groups will be evaluated by analysis of variance.
Duration: April 1967-April 1969.
Investigator(s): Elise E. Lessing, Ph.D., Senior Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: Publication planned in professional journals.

23-NC-2 ADOLESCENT PARTICIPATION IN CIVIL DISTURBANCES

Purpose: To investigate the types of participation of adolescents in three civil disturbances associated with Negro college campuses; specifically, to study the roles taken by the students in the disorder as a function of their affiliation with schooling and the controls which developed to limit the disorder.
Subjects: College and high school students, and nonaffiliated adolescents who participated in civil disorders in Houston, Tex., Jackson, Miss., or Nashville, Tenn. in the Spring of 1967.
Methods: Data collected through interviews and documentary sources.
Duration: October 1967-June 1968.
Investigator(s): J. R. Newbrough, Ph.D., Associate Professor of Psychology, and Coordinator, and Ethyl Metcalfe, M.Ed., Center for Community Studies, George Peabody College for Teachers, Nashville, Tenn. 37203.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-NF-1 A STUDY OF RACE AND ATTITUDES TOWARD SCHOOL

Purpose: To explore the attitudes of children, particularly Negro slum children, toward school and learning; to develop valid and reliable ways of carrying out such attitude measurement.
Subjects: White and Negro children in grades one and two.

Methods: Children are individually shown specially prepared sketches of classroom events designed to elicit perceptions of teacher helpfulness and reward/punishment structure of the classroom. In a racial preference test, also administered individually, children indicate which of two school classes, one predominantly white, one predominantly Negro, learns best, has the nicest children, etc. Finally, in a group administered social distance test, children place figures representing themselves in a two dimensional space with figures representing school, home, and peers.
Findings: In the racial preference test, white children in an integrated and in an all-white school showed an overwhelming preference for the predominantly white classrooms, while Negro children in an integrated and an all-Negro school showed no strong preference for either white or Negro classrooms. Test-retest reliability with four week interval was .63.
Duration: June 1966-June 1969.
Investigator(s): Sandra R. Cohen, Ph.D., Research Psychologist, Developmental Research Division, Educational Testing Service, Princeton, N. J. 08540.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Plan to report in Research Bulletin series of Educational Testing Service; also journal publication and possibly monograph or book.

23-NF-2 GENERALIZATION OF STATUS CHARACTERISTICS

Purpose: To study the phenomenon of the self-fulfilling prophecy. When Negro and white work together on a new cognitive task, there is a tendency for the general social expectations of Negro inferiority to diffuse into the new situation. The white expects the Negro to do less well, and the Negro accepts this evaluation of his competence. Thus, the stage is set for a self-fulfilling prophecy; the whites turn out to be more active and competent in the new task, and the Negroes play a less active, competent, and influential role. This process goes on independently of the actual competence of the individuals.
Subjects: Balanced groups of lower class white and Negro high school boys.
Methods: Boys are compared in rates of performance output on a standardized problem-solving game. In an experimental treatment, the Negro participants are given more information, and their influence and performance, which are expected to increase under these circumstances, are observed. All participants will again play the game to determine whether expectations about performance have changed as a result of the experiment and whether they have generalized to another situation.
Duration: September 1967-September 1969.
Investigator(s): Elizabeth G. Cohen, Ph.D., Assistant Professor of Education, Stanford University, Stanford, Calif. 94305.
Cooperating group(s): National Science Foundation.

23-NF-3 RELATIONSHIPS BETWEEN INTELLIGENCE AND PARENTAL ATTITUDES AND RACE AWARENESS IN FIVE-YEAR-OLDS

Purpose: To investigate relationships between children's awareness of race, their intelligence, and the race attitudes of their parents; specifically, to determine extent to which children of parents with a segregation point of view evidence race awareness as compared to children whose parents do not hold this view, and to determine role of intelligence of preschool children in applying race awareness to social groupings.

Subjects: 60 five-year-old white boys and girls from middle class neighborhoods who attended Protestant church kindergartens in Charlotte, N. C.
Methods: The Lorge-Thorndike Intelligence Test was administered to the children, and a Likert Scale composed of 10 items from recent civil rights legislation was administered to the parents. Children were then divided into two groups and scored on time for conceptualizing three dolls as a family unit of mother, father, and child. In one group, all white dolls were used; in the other, a Negro child doll was substituted for the white doll.
Findings: No relationship between I.Q. and the speed of conceptualizing the family was found. There was no difference in time for conceptualization between the two groups and no relationship between parental attitudes and the speed of conceptualizing either a mixed or an all white doll family.
Duration: Completed.
Investigator(s): Louis Diamant, Ph.D., Chairman, Department of Psychology, University of North Carolina, Charlotte, N. C. 28202.
Publications: *Journal of Social Psychology*, in press, 1968.

23-NF-4 RACE OF EXAMINER AS A VARIABLE IN RESEARCH WITH CHILDREN

Purpose: To investigate the role of an examiner's race on the intellectual performance of Negro and white children.
Subjects: 10 white boys, 10 white girls, 10 Negro boys, and 10 Negro girls, all ages five to eight.
Methods: Matched groups of white and Negro children were tested by either a white or Negro student examiner on the WISC and data analyzed.
Duration: June-November 1968.
Investigator(s): Norman Solkoff, Ph.D., Associate Professor of Psychology, State University of New York, Buffalo, N. Y. 14214.
Publications: Publication planned in psychological journal.

23-NG-1 INFANT DEVELOPMENT AMONG THE ZINACANTECO INDIANS OF CHIAPAS, MEXICO

Purpose: To evaluate inborn behavioral characteristics of infants of an isolated Indian group, the Zinacantecos; on the basis of mothering practices, to see the effect of their environment on their innate characteristics to produce their special development.
Subjects: 102 infants, newborn to age nine months.
Methods: A behavioral-neurological assessment of each infant is made three times in the first week following delivery. Bayley Scales are administered monthly, and Rheingold's Schemata are used in twelve four-hour observations of mother-infant interaction.
Findings: Infants are highly monitored motorically at birth and carried in a serape which essentially swaddles them; they are never put out to be played with, and an infant's cry is met with an immediate quieting response, such as frequent breastfeeding. Thus, infants are quiet, very alert to sensory stimuli, and nonexploratory.
Duration: June 1966-September 1967.
Investigator(s): T. Berry Brazelton, M.D., Clinical Associate in Pediatrics, and John S. Robey, M.D., Instructor in Pediatrics, Harvard Medical School, Boston, Mass. 02115.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: *Pediatrics*.

23-NG-2 TRANSITIONAL OPPORTUNITIES PROJECT FOR STUDENTS OF INDIAN BOARDING SCHOOLS

Purpose: To demonstrate the effectiveness of an acculturation program for students of Indian boarding schools.
Subjects: 45 students from the Flandreau Indian School, Flandreau, S. D.; control group of 45 other students from the same class.
Methods: Over a three-year period, experimental group will be provided with supervised weekend and summer experiences including living with host families in nearby communities, cultural, recreational, and educational programs, and employment opportunities when indicated; emphasis is on involvement of students in normal family and community activities. Educational, social, and cultural adjustments of these students will be assessed during and following three-year period and compared with adjustment of controls.
Duration: August 1967-July 1969.
Investigator(s): John D. Little, M.S.W., Project Director, Fern L. Chamberlain, M.S.S.A., Research Specialist, and Milton Erickson, Director of Special Projects, Lutheran Social Services of South Dakota, 600 W. 12th St., Sioux Falls, S. D. 57104.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-NG-3 CEBU FAMILY HEALTH PROJECT

Purpose: To describe in detail the cultural and social factors surrounding specific patterns of childbirth, childcare patterns, and, in general, the reproductive behavior of Cebuano couples.
Subjects: Randomly drawn sample of 3,000 couples (2,400 in the urban center and 600 in the rural barrios) in the Province of Cebu, Republic of Philippines.
Methods: Survey interview, social psychological techniques, and ethnological interviews.
Duration: September 1967-September 1969.
Investigator(s): William T. Liu, Ph.D., Professor of Sociology, and Director, Institute for the Study of Social Change, University of Notre Dame, Notre Dame, Ind. 46556.
Cooperating group(s): San Carlos University, and Cebu Medical Institute, Cebu, Philippines; Agency for International Development, U. S. Department of State.
Publications: Progress Reports I-IV, February, April, July, and September 1968; three monographs planned.

23-NG-4 ATTITUDES TOWARD LEARNING SPANISH AMONG QUECHUA- AND AYMARA-SPEAKING SCHOOL CHILDREN

Purpose: To analyze differences among Peruvian Altiplano school children in linguistic background, socioeconomic status, place of residence, etc. with regard to their attitudes toward Spanish and social change in general.
Subjects: Fifth grade children in four provinces of the Department of Puno.
Methods: Administration of questionnaires in classrooms.
Duration: 1966-1969.
Investigator(s): Erwin H. Epstein, Ph.D., Assistant Professor, Department of Educational Policy Studies, University of Wisconsin, Madison, Wis. 53706.
Cooperating group(s): Ibero-American Area Studies Committee; University of Wisconsin Graduate School Research Committee.

EDUCATIONAL FACTORS AND SERVICES

General

23-OA-1 THE EFFECTS OF THE COLLEGE EXPERIENCE UPON STUDENT OPINIONS AND ATTITUDES

Purpose: To sample attitudes and opinions of Simmons College undergraduates at repeated intervals, using both equivalent populations at different times, and the same population at different stages in the college experience.
Subjects: Random samples, stratified as appropriate, of the College undergraduate body.
Methods: Chiefly use of test instruments from the Institutional Research Program for Higher Education of the Educational Testing Service: the College and University Environment Scales (CUES) and the College Student Questionnaires (CSQ-1 and CSQ-2). Locally devised questionnaires and test devices used in addition.
Duration: September 1965-continuing.
Investigator(s): J. Garton Needham, Ph.D., Director of Institutional Studies, Simmons College, Boston, Mass. 02115.
Publications: Two reports available from Dr. Needham.

23-OA-2 THE EDUCATIONAL PARK

Purpose: To study the impact of concentrated educational facilities on pupils, parents, the community-at-large, and intergroup tensions.
Subjects: Pupils in Head Start through twelfth grade.
Methods: A concentrated educational facility will be created through a cooperative effort of teachers, administrators, city planner, transportation specialist, architect, space designer, economist, and sociologist.
Duration: February 1967-October 1968.
Investigator(s): Max Wolff, Ph.D., Senior Research Sociologist, Center for Urban Education, 105 Madison Ave., New York, N. Y. 10016.
Publications: Superintendent of Documents, U. S. Government Printing Office.

23-OB-1 CENTRAL UTAH PROJECT ON INDIVIDUALIZATION OF INSTRUCTION

Purpose: To identify, diagnose, and analyze behavioral patterns of children at an early age, and to program to meet these needs.
Subjects: Pupils in kindergarten through third grade in the Provo School District.
Methods: Individual inventories describing the needs of each child are written by the teachers in kindergarten, first and second grades and analyzed by a team of specialists consisting of teacher, principal, school psychologist, social worker, nurse, speech and hearing therapist, primary supervisor, and resource teacher when available. A child needing help is

referred to the specialist most able to help him. Because learning is complex and involves more than academic achievement, all aspects of behavior are considered in organizing a program. Constant evaluations are made to determine program adjustments, and appropriate followup procedures are employed. Parents are often involved in programming.
Findings: During the spring of 1967, 75 kindergarten children were referred to specialists for individual attention. Of these, followup was necessary for 47. Because of an increased awareness of the individual needs of children, teachers have shown a greater commitment to help the child.
Duration: January 1967-June 1970.
Investigator(s): Vern Brimley, M.A., Director of Federal Programs, Provo School District, Box 816, Provo, Utah 84601. (Reported by Dr. Sherman W. Wing, Superintendent, Provo School District.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Dissemination material available.

23-OB-2 THE EFFECT OF A GROUP GUIDANCE PROGRAM UPON SELF-ESTEEM, INTERPERSONAL RELATIONSHIPS, AND EDUCATIONAL ACHIEVEMENT OF THE CULTURALLY DIFFERENT CHILD

Purpose: To implement and specify the influence of certain group guidance programs upon personal adjustments as seen in self-esteem, socially significant attitudes and behavior, and educational achievement of culturally different students.
Subjects: 200 elementary public school children in grades four and five who are identified as culturally disadvantaged by an integrated school district.
Methods: Control and experimental groups, composed of 100 students each, were randomly selected. Data collection involves both groups. Control group receives no additional attention; experimental group is given problems, through film slide or story, which are common to them, e.g., a one-parent home, and a group of 11-15 students is encouraged to discuss the problem. Scales, tests, and magnetic tapes of each session will be used in the evaluation. The Scientific Data System, Model Sigma 7, will be utilized for a statistical analysis of the data.
Findings: Preliminary analysis of pre- and posttest and scales scores indicates positive gains for the experimental groups in school attendance and overt behavior. Data have been submitted to statistical treatment for an analysis of variance and product moment correlation.
Duration: February 1968-January 1969.
Investigator(s): Charleta J. Dunn, Ed.D., Assistant Professor, Department of Guidance and Counseling, University of Houston, Houston 77004, and Bill F. Payne, M.A., Consultant, Division of Guidance Services, Texas Education Agency, Houston, Tex.
Cooperating group(s): Fort Bend, Ind. School District; Hogg Foundation for Mental Health.
Publications: Monograph will be published describing materials, methodologies, and conclusions.

23-OE-1 DEVELOPMENTAL RESOURCE CENTER

Purpose: To set up a demonstration center focusing on the problems of school readiness and developmental grouping as well as developing both preventive and remedial perceptual training programs for primary children.

Subjects: 1,600 children in kindergarten through third grade, housed in five elementary schools.
Methods: Five developmental examiners have been trained over the period of one year to administer the Gesell Developmental Examination. The 10-minute screening section is given to preschool children prior to entrance in kindergarten. Children are then divided into five maturity levels for prekindergarten or kindergarten placements which cut across levels of intelligence. The following spring they are given the full 30-minute test battery for placement in kindergarten, readiness, or first grade. They continue to receive an annual examination until third grade, but may receive one at any time upon the request of either home or school. Perceptual training for kindergarten, readiness, and first and second grade using the problem-solving approach is given one-half hour per day with the program developed during 18 workshop sessions at the Gesell Institute.
Findings: Trends indicate superiority of developmental placement especially in kindergarten and first grade. Levels of achievement are rising, and referrals for special services are diminishing.
Duration: September 1967-June 1971.
Investigator(s): Richard Walker, Ph.D., Research Psychologist, Gesell Institute of Child Development, 310 Prospect St., New Haven 06511; and Marilyn Levy, M.A., Research, Board of Education, Cheshire Public Schools, 84 S. Main St., Cheshire, Conn. 06410. (Reported by Gwynette T. Caruthers, Department of Education, Cheshire.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Publications planned in 1969.

23-OE-2 THE USE OF REMEDIATION TECHNIQUES DEVELOPED ON THE BASIS OF THE ILLINOIS TEST OF PSYCHOLINGUISTIC ABILITIES ON KINDERGARTEN CHILDREN

Purpose: To study the effectiveness of working with special suggested guides based on the 10 areas of diagnostic evaluation on the ITPA.
Subjects: A selected group of approximately 160 kindergarten children showing a lower readiness age on the ABC Inventory prior to school entrance.
Methods: In 1967 a middle class and a lower-middle class to deprived school were selected from an all-white school system of 6,600. A kindergarten class in each school was administered the ABC Inventory and differences in readiness age identified. At the end of the year standard test results were compiled on the Metropolitan Reading Readiness Test and a reading test. In the spring of 1968 incoming kindergarten children were evaluated on the same instrument and divided into two classes, A and B. At the beginning of the 1968 school year, teachers of the B group were given guides for working with their group which had been developed by researchers and teachers involved with the culturally handicapped and the ITPA categories for communication learning. A psychologist will meet twice weekly with a small group of B students using operant techniques with the lowest achievers to determine whether this approach can bring about results at this age. Children will be followed through primary grades.
Findings: The readiness test did identify children who later showed their inability to work on a kindergarten level or to be ready for first grade.
Duration: September 1967-June 1970.
Investigator(s): Esther Yalowitz, M.S., School Psychologist, and David Kashey, M.A., Director of Curriculum, Pekin Public Schools, 501 Washington, Pekin, Ill. 61604.
Publications: Data and results available from Mrs. Yalowitz.

23-OF-1 THE SECOND TIME AROUND: A STUDY OF ACHIEVEMENT AND PROGRESS OF BOYS WHO REPEATED ONE OF THE FIRST THREE GRADES IN SCHOOL

Purpose: To identify the significant social and psychological variables associated with academic progress of boys who repeat a primary grade.

Subjects: A total of 57 first, second, and third grade boys who failed and were repeating the grade.

Methods: In-depth interviews were conducted during retained year with boys' mothers to determine familial attitudes toward child and education. Additional data about boys were gathered through semistructured interviews with teachers, principals, and guidance personnel, as well as from cumulative school records and test scores.

Findings: Variables associated with achievement and progress were level of maturity, parental acceptance of child, peer relationships, emotional stability, and time of retention. Most boys had incipient learning problems prior to failed year.

Duration: January-December 1967.

Investigator(s): Helen Reinherz, Sc.D., Associate Professor, and Director of Research, Simmons College School of Social Work, Boston 02116; and Carol Lee Griffin, Ph.D., Psychologist, and Coordinator of Community Education, South Shore Mental Health Center, 1120 Hancock St., Quincy, Mass. 02169.

Cooperating group(s): The Medical Foundation, Inc.; Quincy Public School System.

Publications: Papers delivered at American Orthopsychiatric Association Meeting, March 1968, and American Public Health Association Meeting, November 1968. Publications also planned for appropriate professional journals.

23-OF-2 PROJECT PLAN (PROGRAM FOR LEARNING IN ACCORDANCE WITH NEEDS)

Purpose: To develop a comprehensive system of individualized education designed to significantly improve the achievement of each student.

Subjects: Students in all grades in 14 cooperating school districts throughout the country.

Methods: The student's individual curriculum is developed by himself, with assistance from his teacher, using a flexible set of instructional segments. His educational objectives are selected by a systematic guidance and individual planning program. Information storage and retrieval services of a computer are used to assist student and teacher with test-scoring, record-keeping, data analysis, and matching operations.

Duration: January 1967-1971.

Investigator(s): John C. Flanagan, Ph.D., Chairman, Board of Directors, American Institutes for Research, Box 1113, Palo Alto, Calif. 94302.

Cooperating group(s): Westinghouse Learning Corporation.

Publications: *Phi Delta Kappan* 49:1:27-33, 1967; additional publications planned.

23-OF-3 EDUCATIONAL ACHIEVEMENT AND SOCIAL ADJUSTMENT IN INTELLECTUALLY AVERAGE PHENYLKETONURIC CHILDREN--A PILOT STUDY

Purpose: To study the educational achievement and social adjustment of treated phenylketonuric children.

Subjects: Six treated PKU children at the Vanguard School near Philadelphia.

Methods: Pertinent data were extracted through review of the extensive cumulative folders kept on the children. Selected tests were administered, and children were observed. Teachers and supporting personnel provided interview data, and social maturity information was obtained from appropriate individuals.
Duration: October-December 1967.
Investigator(s): Bartell W. Cardon, Ph.D., Assistant Professor of School Psychology, Pennsylvania State University, University Park, Pa. 16802.
Cooperating group(s): The Devereux Foundation, Devon, Pa.
Publications: Plan to submit for publication.

23-OF-4 THE NATURAL HISTORY OF THE EDUCATION OF THE DEPRIVED NEGRO CHILD

Purpose: To study the learning experiences of selected disadvantaged Negro children in home, school, and peer cultures, concentrating on the experiences of particular children in order to learn why particular ghetto children succeed or fail in school.
Subjects: Disadvantaged Negro kindergarten children; upper-middle class white kindergarten children.
Methods: Kindergarten classes are observed twice weekly for one and one-half hours by five researchers whose observations are dictated after each session and discussed and analyzed. Several children from each class will be selected for observation in the homes according to a teacher's evaluation of "children doing well" or "children doing poorly". "School culture" will be studied by formal and informal interviews with school personnel. Children will be followed through first grade.
Findings: Most cognitive studies are based on experiment with adult-conceived matrices imposed on the child. In Negro ghetto kindergartens, adult matrix often fails, and children do not learn. Investigator calls this phenomenon "anticognition".
Duration: June 1967-May 1970.
Investigator(s): Jules Henry, Ph.D., Professor of Anthropology-Sociology, Washington University, St. Louis, Mo. 63130.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Papers and book planned.

23-OF-5 AN EVALUATION OF A NEW APPROACH IN DEALING WITH HIGH SCHOOL UNDERACHIEVEMENT

Purpose: To determine whether high school achievers differ from normally achieving children in their internal-external expectancy; to test hypothesis that underachievers who are high in externality will improve in academic performance if a change toward more internal attitude is effected.
Subjects: High school underachievers.
Methods: Underachievers who are high in externality are randomly assigned to one of three treatment groups: (1) computer group, where immediate reinforcement of own behavior is provided in learning programming language; (2) tutorial group; and (3) study group approach, where the aim is to improve study habits. The three groups' gain scores are compared on an Internality-Externality scale and on measures of academic performance.
Duration: September 1968-August 1969.
Investigator(s): Alexander Tolor, Ph.D., Director, Institute for Human Development, Fairfield University, Fairfield, Conn. 06430.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Journal publication planned.

23-OG-1 EFFECTS OF EARLY SCHOOL FAILURE ON LATER CAREERS OF JUNIOR HIGH SCHOOL BOYS

Purpose: To study the longitudinal effects of primary grade retention upon the social, emotional, and academic adjustment of junior high school boys.
Subjects: 80 seventh and eighth grade boys, 40 retained in one of the first three grades and 40 not retained. Groups matched for grade level, socioeconomic background, I.Q., and same elementary school.
Methods: School progress, self-concept, and vocational aspirations are studied through in-depth interviews with subjects, administration of a self-concept scale, examination of school cumulative records, and interviews with school guidance personnel.
Duration: January 1968-January 1970.
Investigator(s): Helen Reinherz, Sc.D., Associate Professor, and Director of Research, Simmons College School of Social Work, Boston 02116; and Carol Lee Griffin, Ph.D., Psychologist, and Coordinator of Community Education, South Shore Mental Health Center, 1120 Hancock St., Quincy, Mass. 02169.
Cooperating group(s): The Medical Foundation, Inc.; Quincy Public School System.
Publications: Presented in part at the American Public Health Association Meeting, November 1968; articles planned for appropriate journals.

23-OG-2 PUPIL ADJUSTMENT AS RELATED TO SEX OF TEACHER

Purpose: To compare adjustment in relation to reactions towards self, school, and teacher, of children who have never had a male teacher with that of children who have.
Subjects: One group of elementary school boys and girls who have never had a male teacher and another group who had completed a year's experience with a male teacher.
Methods: Battery of objective measures of self-concept (Mental Health Analysis), teacher approval (Checklist of Trait Names), and pupil attitudes towards school (SRA-school problems) was administered to both groups late in the school year. Results were compared between boys with female teachers only and those with male teachers and between girls with female teachers only and those with male teachers.
Duration: Not reported-August 1967.
Investigator(s): Clayton G. Farrall, Ph.D., Congdon Campus School, State University of New York, Potsdam, N. Y. 13676.
Cooperating group(s): Research Foundation, State University of New York.

23-OG-3 CONCEPTIONS OF JUSTICE AMONG SCHOOL CHILDREN

Purpose: To investigate characteristics of a situation which determine whether arguments of justice or other types of arguments are used.
Subjects: 235 fifth grade children in five different schools in the Oslo area.
Methods: Children were interviewed for periods of 30 to 60 minutes and asked to describe the way their teacher distributes benefits and burdens, such as questions, praise, and punishments. They were further asked to tell how they would prefer these to be distributed and to give reasons for their preferences. In addition, data were gathered on sex, sibling position, relationship with teacher, and general adjustment in class.
Duration: July 1962-December 1967.

Investigator(s): Siri Naess, Research Associate, and Torstein Eckhoff, Institute for Sociology of Law and Public Administration, Fuglehaugate 6, Oslo, Norway. (Reported by NCCD. See Note, p. 72.)
Cooperating group(s): Norwegian Research Council for Science and the Humanities.

23-OJ-1 PARENTAL PARTICIPATION: ITS EFFECT ON THE FIRST GRADE ACHIEVEMENT OF CHILDREN IN A DEPRESSED AREA

Purpose: To determine the effect of parental participation in the education of their children on children's achievement.
Subjects: Children in first grade in 1967-1968 in a depressed area, and their parents; control group of 1966-1967 first grade class whose parents were not actively encouraged to participate.
Methods: Parents are encouraged to assist their children in a learning situation and to cooperate with the school. Achievement mean score and reading achievement scores for the two classes will be compared. Correlation will be determined between reading achievement and reading readiness, intelligence, parents' occupations, and parents' schooling for both classes.
Duration: 1967-1968.
Investigator(s): Florence Heisler, Ph.D., Brooklyn College, City University of New York, Brooklyn 11210; and Edward McCausland, Principal, Mount Avenue School, Wyandanch, N. Y. 11798.

23-OJ-2 ANALYSIS OF HOME ENVIRONMENT AND DEVELOPMENT OF PARENT INTERVENTION PROCEDURES

Purpose: To observe and analyze the home environment of children in Head Start Project, particularly the mother-child interaction; to diagnose the characteristics of the environment which are judged likely to contribute to future poor academic performance by the child; to design and carry out with the mother an intervention program designed to counteract these environmental characteristics.
Subjects: Large, poor, intact white families living in isolated rural areas.
Methods: Data with which to characterize family and home environment will be derived from interviews with mother, observation of mother and child in structured play situations, observation of the family visiting the nursery school, and observation and testing of the child in nursery school. Intervention program consists of weekly visits by a home teacher who introduces activities involving the mother and child which they continue throughout the week. The activities are primarily designed to increase the quantity and quality of verbal interaction between mother and child, to improve their attitude toward school, and to increase the mother's participation in the community.
Findings: Data suggest that the children are well socialized but nonverbal.
Duration: February 1967-November 1971.
Investigator(s): Margaret Parkman, Ph.D., Assistant Professor, and Helen Bayer, Ph.D., Professor, Department of Child Development and Family Relationships, Cornell University, Ithaca, N. Y. 14850. (Reported by Dr. Edwenna R. Werner, Research Associate, Department of Child Development and Family Relationships.)
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Data will be available from Dr. Werner.

23-OK-1 IMPROVING ATTITUDES, CULTURAL UNDERSTANDING, AND THE OPPORTUNITY FOR ACHIEVEMENT

Purpose: To equalize educational opportunities for all students by improving self-concept of minority students; to improve cultural understanding by providing sources of information concerning the cultural contributions of minority people; to improve social attitudes toward different ethnic groups.

Subjects: 81 fifth grade classes from 51 Denver public elementary schools; 15 fifth grade Catholic classes.

Methods: Project has four basic components: (1) 14 color television programs designed to present factual information about Asian Americans, American Indians, Negro Americans, and Hispanic Americans are presented for classroom viewing by students and evening viewing by parents; (2) direct contact equal status activities are planned, including field trips to cultural agencies with "buddies" from other schools and interschool "buddy" exchanges; (3) provision is made for classroom instruction and program enrichment such as Young Audience concerts; and (4) parents will participate via television and evening seminars or programs.

Duration: May 1967-March 1968.

Investigator(s): Joseph E. Brzeinski, Ed.D., Director, Will Howard, M.A., Coordinator, Title III, and Michael Massarotti, M.A., Evaluator, Research Services, Denver Public Schools, 414 - 14th St., Denver, Colo. 80204.

Cooperating group(s): Numerous cultural, civic, and ethnic organizations in Denver.

Publications: Results will be available from Dr. Brzeinski, and from Educational Resources Information Center, Office of Education, U. S. Department of Health, Education, and Welfare.

23-OK-2 THE ELEMENTARY CURRICULUM AS A FACTOR IN RACIAL UNDERSTANDING

Purpose: To determine whether racial cleavage in children can be lessened and the self-concept of Negro and white children improved by a study of the Negro's heritage and his contribution to America; to analyze the influence of community contacts upon racial cleavage and the children's self-concepts.

Subjects: Three groups of eight classes each: experimental group of Negro and white children from the same area; experimental group of Negro and white children from different neighborhoods; control group of Negro and white children from the same area.

Methods: The degree of the children's social, academic, and recreational interaction was measured through a sociometric instrument. All pupils were given the Piers-Harris Measure of Self-Concept and a test to determine their knowledge of the American Negro's history and culture. Only the experimental groups were then taught the textbook unit on "The American Negro"; upon the completion of the unit, all classes were retested and data analyzed to see if any significant differences between groups had developed; calculations were made to determine if an increase in knowledge is related to a reduction in racial cleavage and an improvement in self-concept.

Duration: June 1966-December 1967.

Investigator(s): John Georgeoff, Associate Professor of Education, and Mary Endres, Professor of Education, and Director, Purdue Educational Research Center, Purdue University, Lafayette 47907; Imogene Jones, Elementary School Supervisor, Gary Public Schools, Gary, Ind.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-OK-3 FACTORS CONTRIBUTING TO ADJUSTMENT AND ACHIEVEMENT

Purpose: To determine the antecedents and concomitants of successful or unsuccessful integration of Negro, Mexican-American, and Anglo children in a public school setting; specifically, to study those characteristics of the child, his parents, and the school as they affect academic achievement and emotional adjustment; to assess both long-term and short-term effects of desegregation.
Subjects: 615 Mexican-American children, 406 Negro children, and 8 children from other ethnic groups, all attending three segregated minority schools, matched by grade with a random sample of 712 Anglo children from formerly all-white schools; all children were in kindergarten through sixth grade in the Riverside Unified School District during the school year 1965-1966.
Methods: Design is basically a seven-year natural time series experiment consisting of a premeasurement and six successive postmeasurements. Matched control groups will provide baselines for evaluating the effects of community sensitization, repeated testing of the sample, and general sociocultural changes occurring over the time span of the study. Extensive multiple measures will be taken of all variables: achievement, personality, and adjustment of the child, parental values and attitudes, and school and teacher characteristics. The impact of desegregation on both the majority and minority child will be evaluated, as will the extent to which these effects feed back through the child to alter family attitudes, values, interaction patterns, and community participation.
Duration: 1966-continuing.
Investigator(s): Harold B. Gerard, Ph.D., Professor of Psychology, University of California, Riverside, Calif. 92502.
Cooperating group(s): National Institute of Child Health and Human Development, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Progress report, University of California, Riverside, May 1968.

23-OK-4 COMMUNICATION PATTERNS IN INTEGRATED CLASSROOMS AND PREINTEGRATION SUBJECT VARIABLES AS THEY AFFECT THE ACADEMIC ACHIEVEMENT AND SELF-CONCEPT OF PREVIOUSLY SEGREGATED CHILDREN

Purpose: To isolate the significant variables which influence the academic success of Negro children who move from segregated to integrated classrooms.
Subjects: All Negro children who attended a segregated elementary school and were moved to integrated classes in schools of the same system.
Methods: Independent variables were pupil characteristics prior to integration and the interaction pattern experienced in the integrated classroom, including the amount of teacher-white pupil, teacher-Negro pupil, and Negro-white verbal interaction. Pupil academic achievement and change in self-concept were the dependent variables. Subjects were tested prior to integration on level of concept formation, cognitive style, self-concept, and occupational aspirations. Sociograms and monthly time samples of verbal interaction between teachers and pupils measured classroom interaction. Academic achievement and self-concept changes were measured following one year of integrated schooling. Multiple regression analyses were used to determine the effect of preintegration pupil characteristics and classroom integration patterns on academic achievement and self-concept.
Duration: 1964-1967.
Investigator(s): Florence L. Denmark, Ph.D., Department of Psychology, Hunter College, City University of New York, New York, N. Y. 10021.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-OK-5 "NOT BY THE COLOR OF THEIR SKIN"

Purpose: To explore over a long period of time the impact of increasing integration in a nursery school setting.
Subjects: Students in the Hanna Perkins therapeutic nursery school.
Methods: Mothers were seen weekly, and reports obtained at weekly conferences. Children were observed as a group in the nursery school setting.
Duration: September 1964-September 1968.
Investigator(s): Marjorie McDonald, M.D., Consulting Psychiatrist, Hanna Perkins School, Cleveland Center for Research in Child Development, 2084 Cornell Rd., Cleveland, Ohio 44106. (Reported by Robert A. Furman, M.D., Director, Cleveland Center for Research in Child Development.)
Cooperating group(s): Day Nursery Foundation; Cleveland Psychoanalytic Society Foundation.
Publications: Monograph or article planned.

23-OK-6 CHARACTERISTICS OF NEGRO AND WHITE HIGH SCHOOL STUDENTS PRIOR TO DESEGREGATION

Purpose: To study the impact of high school desegregation on student functioning; specifically, to gather data, assess instruments used, and identify differences and similarities among students.
Subjects: Negro and white children in grade nine; random samples of tenth and eleventh grade children.
Methods: Subjects are given a variety of tests, the results of which are analyzed descriptively. Means, standard deviations, correlation coefficients, and reliability coefficients are calculated and analysis of variance used to categorize between samples. Evidences of present school functioning and changes resulting from desegregation are anticipated.
Duration: 1967-September 1968.
Investigator(s): Berj Harootunian, Ph.D., Syracuse University, Syracuse, N. Y. 13210; and Richard J. Morse, Ph.D., Chairman, Division of Social Sciences, Stillman College, Tuscaloosa, Ala. 35401.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Specific Skills

23-PA-1 EFFECT OF INSTRUCTION ON DEVELOPMENT OF THE CONCEPT OF NUMBER

Purpose: To assess the knowledge of five- and six-year-old children regarding one-to-one correspondence and the invariance of number; to examine the effect of instruction on accelerating the acquisition of the concept of invariance of number.
Subjects: Children in the three kindergarten and two first grade classes of the Campus School.
Methods: Lorge-Thorndike Intelligence Test and a specially constructed Pretest on Invariance of Number developed from Piaget's clinical procedure were administered and tape recorded. Children were then classified by chronological age at Stage I, Stage II, or Stage III in their understanding of number, and assigned to experimental and control groups matched with respect to stage placement, chronological age, and sex. For a five-week period, experimental groups received instruction designed to develop

an understanding of equivalent sets and invariance of number while control groups followed the regular program of instruction in mathematics. Following the experimental period, the Posttest on Invariance of Number was administered and results analyzed to determine whether the instruction produced statistically significant gains.
Duration: 1966-1967.
Investigator(s): Dr. Angela Pace, Professor of Education, State University of New York, Cortland, N. Y. 13045.
Publications: *Journal of Educational Research*.

23-PA-2 MODERN MATHEMATICS AND INTELLIGENCE

Purpose: To establish the effect of modern mathematical learning on performance of children on intelligence tests.
Subjects: 1,000 pupils, age seven and older.
Methods: Pre- and posttest of Raven Progressive Matrices and Lorge-Thorndike Test were administered at the beginning and end of the school year.
Findings: Suggestions of a rise in I.Q. scores.
Duration: September 1967-January 1969.
Investigator(s): John D. Williams, B.Sc., Leader, Section for Mathematical and Conceptual Studies, and Kenneth Fogelman, B.A., National Foundation for Educational Research in England and Wales, 79 Wimpole St., London, W.1, England.
Cooperating group(s): Prof. Z. P. Dienes, Centre de Psychomathematique, Sherbrooke University, Sherbrooke, Quebec, Canada.
Publications: Section for Mathematical and Conceptual Studies Internal Bulletin No. 1, July 1967.

23-PB-1 THE USE OF AUDIOLINGUAL DRILLS TO FOSTER SYNTAX ACQUISITION IN THE WRITING OF FOURTH GRADE ELEMENTARY SCHOOL CHILDREN

Purpose: To investigate the value of audiolingual and written drills based on the audiolingual drills for writing improvement in fourth grade children.
Subjects: Fourth grade children.
Methods: Students were drilled orally on exercises involving sentence-combining transformations and then required to write selected examples of these sentences. They were asked to write free compositions periodically as a test of whether the methodology gave them command of an increasingly large inventory of structures.
Duration: 1966-1967.
Investigator(s): James W. Ney, Assistant Professor, English Language Center, Michigan State University, East Lansing 48823; Barbara D. Miller, Okemos Public Schools, Okemos, Mich. 48864.

23-PB-2 REPLICATION AND EXTENSION OF READING AND WRITING GRADIENTS: PRESCHOOL

Purpose: To replicate the work of Hildreth, Monroe, Gesell, Ilg, and Ames in the areas of preschool reading and writing behavior; to develop a normed test so these studies may be more precisely carried out; to extend the earlier studies to get norms by sex, race, and socioeconomic status.
Subjects: At least 50 boys and girls, ages three to five, of different races and socioeconomic status.

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Methods: A criterion-reference test is administered and observational data collected.
Findings: Stimulated disadvantaged preschool children appear superior to advantaged traditional kindergarten children at least in (1) Handling Books behavior, (2) Picture Reading behavior, (3) Print Attention behavior, (4) Book-Related behavior, (5) Letter-and-Word-Reading behavior, and (6) Writing behavior.
Duration: January 1967-June 1970.
Investigator(s): Robert L. Aaron, D.Ed., Research Associate, Research and Development Center, University of Georgia, Athens, Ga. 30601.
Publications: In Proceedings, 13th Annual International Reading Association Convention, April 1968.

23-PB-3 THREE YEARS OF EXPERIMENTATION WITH THE INITIAL TEACHING ALPHABET

Purpose: To determine the effectiveness of the Initial Teaching Alphabet for providing beginning reading instruction to children from the West Genesee Central Schools.
Subjects: Representative sample of 556 children; control group of 1,418 traditionally taught children.
Methods: Initial Teaching Alphabet was used for beginning reading instruction to the experimental i.t.a. population. Control population received instruction from the traditional American basal reading series. Comparisons were made between the experimental and control populations on intelligence to determine the comparability of the groups. Following this, comparisons were made on criterion measures obtained from the Stanford Achievement Tests in grades one and two and Iowa Test of Basic Skills in grade three.
Findings: The experimental i.t.a. instructed children earned statistically significantly superior scores in the reading area when compared to the traditional orthography group at the end of grade one. I.t.a. transliterated forms of the test were administered to the i.t.a. instructed students. At the end of grade two when all testing was done on tests printed in the traditional orthography, the i.t.a. students earned significantly superior scores in spelling. The third grade testing revealed no significant differences between the experimental and control groups in reading.
Duration: Fall 1964-Summer 1970.
Investigator(s): Joan M. Ward, Senior Clinical Psychologist, Syracuse State School, Syracuse 13201; and Byron J. Ward, Ph.D., Director of Reading, West Genesee Central School District, 5203 W. Genesee St., Camillus, N. Y. 13031.
Publications: Paper submitted for presentation at the International Reading Association Meeting, April 1968.

23-PB-4 SCREENING FOR POTENTIAL READING DIFFICULTIES

Purpose: To devise a screening protocol based on the concept that brain functioning irregularities might result in difficulties in learning to read, and to administer it to children soon after entry into kindergarten to detect future reading disabilities.
Subjects: 300 kindergarten children enrolled in a Fresno elementary school in the fall of 1967 and 1968.
Methods: Teacher and parent questionnaires and individual psychological test data were collected on all kindergarten children and neurological examinations administered to a random sample. Students will be followed and group test data collected until the end of the second grade. Criterion

measure will be reading level at that time. Data will be analyzed to select those factors in kindergarten which would have predicted achievement at end of second grade.
Duration: May 1966-June 1969.
Investigator(s): Knox H. Finley, M.D., Director, Institute of Neurological Sciences, and Philip R. Calanchini, M.D., Associate Director, Neurological Education Division, Institute of Neurological Sciences, Pacific Medical Center, San Francisco 94115; M. Agnes McDermott, M.A., and Robert E. Doris, M.A., School Psychologists, and Margaret L. Thomas, M.A., Director of Guidance and Testing, Fresno City Unified School District, 2348 Mariposa St., Fresno, Calif. 93726.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Completed project report will be available in the fall of 1969.

23-PB-5 TUTORIAL INSTRUCTION FOR UNDERACHIEVING READERS AND WRITERS

Purpose: To improve the reading and writing performances of nonremedial students, typically receiving "C" grades and above, who are not achieving up to potential in these areas.
Subjects: 68 students each in grades 4, 7, and 10, selected on the basis of discrepancies between their obtained scores on the STEP Reading and Writing Tests and predictions of their potential on the California Test of Mental Maturity.
Methods: Students have been randomly assigned to three treatments: one-to-one tutoring (one student to one college student tutor); one-to-three tutoring (three students to one tutor); and control (remained in the regular classroom without being identified to the teacher). Groups have been compared on mean gains on the STEP Tests and teacher-developed tests for the first year, using analysis of covariance, and on relative frequency of reaching predicted potential for both years, using chi square.
Findings: Students under both tutorial conditions (one-to-one and one-to-three) have shown significant gains over control students, usually beyond the .01 and .001 levels of significance. Tutoring appears to be equally effective at all three grade levels. Neither tutorial condition (one-to-one or one-to-three) has shown an advantage over the other on the project measures.
Duration: August 1966-June 1969.
Investigator(s): Dee Nuhn, Director, Tutorial Project, Logan City and Cache School Districts, 101 W. Center; and James P. Shaver, Ed.D., Professor and Chairman, Bureau of Educational Research, Utah State University, Logan, Utah 84321.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Utah Educational Review 61:3, January-February 1968; Tutorial Instruction for Underachieving Readers and Writers. Logan, Utah: Logan City-Cache County School Districts, February 1968.

23-PB-6 LABORATORY CENTER FOR READING

Purpose: To explore the relationship between listening skills and reading disabilities; to establish a program which will enable children with reading disabilities to develop reading-thinking skills.
Subjects: Disabled readers of average or better potential, ages 8 to 10, attending Newport News Schools.

Methods: Small classes focus on individual instruction based on children's needs as determined from reading and psychological evaluations, teachers' evaluations, and social histories. Developmental patterns are analyzed using social histories and cumulative record data, and an analysis of WISC profiles is done on a selected sample of children. Parents are involved in program.
Duration: January 1966-August 1968.
Investigator(s): Molly Parrish, M.Ed., Coordinator of Reading, and Ruth Mulliken, Ph.D., Psychological Consultant, Laboratory Center for Reading, Newport News Public Schools, 225 River Rd., and Professor of Psychology, Christopher Newport College, Newport News, Va. 23601.
Publications: Plan to publish in professional journals.

23-PB-7 CRITICAL READING ABILITY OF ELEMENTARY SCHOOL CHILDREN

Purpose: To refine and verify a description of the desired behavior of a critical reader; to survey and test materials, techniques, and activities for use with elementary school children; to determine if critical reading can be taught in grades one through six while the usual instruction in basic skills is continued and interest in reading is maintained; to determine what pupil characteristics are related to critical reading.
Subjects: Students in 24 classrooms--four each at grade levels one through six; controls.
Methods: The tentative definition of critical reading was first verified by a panel of experts. A catalogue of successful techniques for teaching critical reading was organized, and tests and materials to be used with subjects in an experimental phase were developed. Pre- and posttests were administered, and statistical analysis was applied to results.
Duration: 1966-not reported.
Investigator(s): Willavene S. Wolf, Ph.D., Bureau of Educational Research and Services, College of Education, Ohio State University, Columbus, Ohio 43210.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Special Education

23-QC-1 ESTABLISHMENT OF CORRECT USE OF PRONOUNS AND PREPOSITIONS IN SCHIZOPHRENIC AND RETARDED CHILDREN

Purpose: To investigate the conditions under which handicapped children can learn the correct use of and response to prepositions and pronouns.
Subjects: Schizophrenic and organically impaired children, who are both intellectually and linguistically retarded.
Methods: Emphasis centers on speech useful in the child's daily functioning. A reinforcement theory paradigm and an experimental-laboratory design are used; the material employed consists of objects and articles from the child's environment. Intelligence-predictor tests are administered. Data analyses include a separate treatment of the results of training, extinction, and retraining series, analyses of covariance, and followup comparisons.
Duration: Not reported-September 1969.
Investigator(s): O. Ivar Lovaas, Ph.D., Professor of Psychology, University of California, Los Angeles, Calif. 90024.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-QE-1 THE SAN ANTONIO LANGUAGE RESEARCH PROJECT FOR DISADVANTAGED SPANISH-SPEAKING CHILDREN

Purpose: To improve the self-image of disadvantaged Spanish-speaking children by providing an experiential background rich in conceptual understandings, and by establishing command of basic linguistic forms and increasing proficiency in the use of oral English to be phased into reading and writing.
Subjects: 2,450 first, second, and third grade pupils in 81 classrooms; control group of 24 classes ranging from very low to high socioeconomic levels and including variations of Mexican-American, Negro, and Anglo ethnic groups.
Methods: Intensive daily instruction in oral-aural English and oral-aural Spanish; instruction in American Association for the Advancement of Science science content not using intensive language techniques (nonoral-aural). Continuous and intensive teacher education is provided through inservice programs.
Duration: September 1964-June 1970.
Investigator(s): Thomas D. Horn, Ph.D., Professor and Chairman, and Richard D. Arnold, Ph.D., Assistant Professor, Department of Curriculum and Instruction, College of Education, University of Texas, Austin 78712; Elizabeth H. Ott, Ph.D., Southwest Education Development Laboratory, Inc., Austin 78701; and Raymond Arnold, M.A., Assistant Superintendent, San Antonio Independent School District, San Antonio, Tex.
Cooperating group(s): Texas Education Agency.
Publications: *A Study of Levels of Fluency and Proficiency in Oral English of Spanish-speaking School Beginners*, Elizabeth H. Ott. Austin, Tex.: University of Texas, 1967; *Harvard Educational Review* 36:42-59, Winter 1966; *The Reading Teacher* 20:38-42, October 1966; additional materials available from Dr. Richard D. Arnold.

23-QE-2 INTENSIVE READING AND INSTRUCTIONAL TEAMS (IRIT)

Purpose: To develop an intensified program of team reading instruction, and to explore its effects on selected groups of disadvantaged inner-city youngsters.
Subjects: 469 fourth, fifth, and sixth grade children selected on the basis of flexible criteria which included measured reading achievement one to three years below grade level, an ability to work successfully in a group program as judged by the teacher, and operational fluency in the English language.
Methods: Students were instructed in cycles ranging from 9 to 10 weeks in length by a team of two reading teachers and a reading specialist. Daily instruction stressed vocabulary and comprehension development, phonics to include instruction in word attack skills, and individualized reading, with students moving from teacher to teacher on an hourly basis. Instructional techniques involved a departmentalized structure, the employment of each team member in only one of the three instructional areas, extensive use of motivational and multimedia techniques, new reading materials, and the use of the pupil-teacher conference as both a motivational and an assessment technique.
Findings: Results from the pre- and posttesting of 341 children using the California Reading Achievement Test showed that significant mean gains were made by pupils in the areas of vocabulary, comprehension, and total reading achievement, and that the 1966-67 group gains generally equalled or surpassed those reported for comparable cycles during the previous school year. Data from the Lorge-Thorndike Intelligence Test given to 71 children indicated no significant gains following 10 weeks of intensive instruction. Questionnaires and evaluation forms found that there was an

acceptance of the program by teachers, parents, and pupils coupled with the expressed feeling that the program was beneficial in helping individual children to read. A followup study revealed that approximately 66 percent of the tested group continued to make significant gains in comprehension and total reading, while 38 percent made gains in vocabulary only. Of the remaining children tested, there was no significant change in achievement scores since the end of the IRIT cycle. Consequently, it can be assumed that the gains obtained are still being maintained though not necessarily improved upon.

Duration: September 1965-indefinite.

Investigator(s): Robert J. Nearine, M.A., Coordinator of Evaluation, Hartford Public Schools, 249 High St., Hartford, Conn. 06103.

Cooperating group(s): Connecticut Department of Education.

Publications: Mimeographed report available from Mr. Nearine.

23-QE-3 LEARNING LABORATORY TO TEACH BASIC SKILLS IN A CULTURALLY DEPRIVED AREA

Purpose: To establish a learning laboratory which will provide basic education, individually and in groups, for culturally disadvantaged students preparatory to entrance into vocational training or employment, and inservice training for teachers working with these students.

Subjects: 270 students who need to improve basic skills to qualify for entrance into vocational programs or who are retarded two or more years in reading and arithmetic; control groups.

Methods: The laboratory program is staffed by a coordinator and trained specialists in the language arts, arithmetic, and guidance. It is implemented for a three-year period in a high school setting as an adjunct to regular academic programs offered in grades 10, 11, and 12. Overall program is assessed in terms of changes in basic skills competence, vocational aptitude, vocational aspirations, and employability of students in the program, as compared with control groups.

Duration: May 1965-August 1968.

Investigator(s): Nicholas H. Borota, Principal, Booker T. Washington Junior High School, 1200 N.W. Sixth Ave., Miami, Fla. 33136.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publications: Final report planned for July 1968.

23-QE-4 YPSILANTI CARNEGIE INFANT EDUCATION PROJECT

Purpose: To develop the potential of the home for the adequate education of the young child through a home teaching program.

Subjects: Disadvantaged families with children three months and older.

Methods: Trained teachers make weekly visit to the homes and focus on assisting the mother to aid the child through language patterns, child management techniques, and teaching styles. Some direct teaching of the child is done to assist the mother in understanding the process.

Duration: January 1968-June 1970.

Investigator(s): David P. Weikart, Ph.D., Director, Special Services, Ypsilanti Public Schools, 300 W. Forest, Ypsilanti, Mich. 48197.

Cooperating group(s): Carnegie Corporation.

Publications: Progress report planned for June 1969; final report, June 1970.

23-QE-5 LONGITUDINAL COMPARISON OF THE PSYCHOLINGUISTIC FUNCTIONING OF "EDUCATIONALLY DEPRIVED" AND "EDUCATIONALLY ADVANTAGED" CHILDREN

Purpose: To compare the changes in psycholinguistic functioning of disadvantaged children after one year in an integrated school; to determine whether measurable changes in the psycholinguistic ability of preschool disadvantaged children can be produced through a language-oriented preschool curriculum.
Subjects: Children who had attended a segregated school and were being bussed to an integrated public school; 45 disadvantaged preschool children in Ann Arbor and Inkster, Mich., and control group of 30 children in Inkster.
Methods: Children in the integrated school were pre- and posttested, and data are being analyzed. Disadvantaged preschool children were tested at the beginning of the program. During the year, investigators and teachers developed techniques for improving the language habits of these children. Children were tested at the end of the program to determine whether measurable changes had been produced. Control group was pre- and post-tested without the introduction of the special language program during their preschool experience. The Illinois Test of Psycholinguistic Ability and supplementary measures will be used to assess changes in the preschool children.
Duration: Not reported.
Investigator(s): Loren S. Barritt, M.S., Melvyn I. Semmel, Ph.D., and Paul Weener, Center for Research on Language and Language Behavior, University of Michigan, Ann Arbor, Mich. 48104.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: The Comparison of the Psycholinguistic Function of Educationally Advantaged and Educationally Deprived Children, Progress Report II. (Analysis of the pretest data.)

23-QE-6 THE EFFECT OF PRESCHOOL GROUP EXPERIENCE ON VARIOUS LANGUAGE AND SOCIAL SKILLS IN DISADVANTAGED CHILDREN

Subjects: 54 disadvantaged four-year-old children from low income families in two adjacent census tracts in Fremont, Calif., divided into experimental, active control, and passive control groups for each census area.
Methods: Experimental groups participated in a preschool program concerned with specific behavioral goals in language and social development. Teaching techniques emphasized positive reinforcement of desired behaviors, extinction of undesirable behaviors, and verbal modeling. Parent-teacher conferences were conducted as one of the parent involvement activities. Subjects in the active control groups attended a similar experimental session during the last five days of the six-month program; the passive control groups received no preschool experience. Illinois Test of Psycholinguistic Abilities, Peabody Picture Vocabulary Test, and several language subtests were administered. Statistical analysis employed a three by two analysis of variance procedure with sex and treatment as the variables.
Duration: September 1966-June 1967.
Investigator(s): Dr. Barbara Vance, Child Development Department, Brigham Young University, Provo, Utah 84601.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-QE-7 AN EXPERIMENTAL PRESCHOOL EDUCATION PROGRAM FOR SOCIALLY DISADVANTAGED FAMILIES

Purpose: To test hypothesis that, in a preschool program with an enriched curriculum for socially disadvantaged children, those children whose parents are involved in weekly participation-education activities will show significantly more language and intellectual development than children whose parents are involved minimally.
Subjects: 52 children, starting at age three, assigned on a stratified random basis to two groups; parent participation groups.
Methods: Group I involves intensive parent participation, and Group II, minimal parent participation. Program covers two school years with follow-up tests for subsequent years. Pre- and postmeasures consist primarily of the Peabody Picture Vocabulary Test and the Stanford-Binet (Form L-M). Siblings are tested to compare diffusion effects, and parent attitude measures will compare possible changes.
Duration: October 1966-September 1968.
Investigator(s): Hazel Leler (Ph.D. Candidate), Research Associate, Mental Research Institute, 555 Middlefield Rd., Palo Alto, Calif. 94301. (Reported by Virginia M. Hill, Assistant Administrator, Mental Research Institute.)
Cooperating group(s): Luke B. Hancock Foundation; California Department of Compensatory Education.
Publications: Publications planned at completion of study.

23-QE-8 DETERMINING THE COMPATIBILITY OF STUDENT TEACHERS FOR CULTURALLY DEPRIVED AREAS BY MEANS OF A CULTURAL ATTITUDE INVENTORY

Purpose: To determine whether student teachers who will be successful with culturally disadvantaged children can be selected prior to student teaching by their responses to a Cultural Attitude Inventory.
Subjects: Elementary education students from Pennsylvania State University completing their student teaching with disadvantaged elementary school children in three different cities.
Methods: A Cultural Attitude Inventory was developed and administered to the students, in addition to the Minnesota Teacher Attitude Inventory and Warner's Socioeconomic Scale, prior to their student teaching. On the basis of the scores obtained from the Inventory, those students who would apparently be most effective and those least effective with the disadvantaged were selected and placed for student teaching in schools in disadvantaged areas. The student teachers were observed and rated on an observation record by a student teaching supervisor, cooperating teacher, and the investigator, to determine their effectiveness.
Findings: The Cultural Attitude Inventory was found to be effective and more discriminating than the others in selecting those student teachers who could work successfully with disadvantaged children.
Duration: September 1965-completed.
Investigator(s): Dorothy J. Skeel, D.Ed., Assistant Professor, Indiana University, Bloomington, Ind. 45405. On leave for 1968-69, Tri-University Project, University of Washington, Seattle, Wash. 98105.
Publications: The Cultural Attitude Inventory has been approved for use with Government-sponsored projects and is currently in use at the MCREL Laboratory. In addition, Southern Illinois University at Edwardsville (Psychology Dept.) is working on a verification scale.

23-QE-9 THE EFFECTS OF TEACHER ATTITUDE AND CURRICULUM STRUCTURE ON PRESCHOOL DISADVANTAGED CHILDREN: AN EXPERIMENTAL STUDY OF TWENTY-FOUR CLASSES

Purpose: To evaluate two preschool programs for disadvantaged children--a language ability focused program (Bereiter-Engelmann Method), and a more traditional developmentally structured program emphasizing adjustment, motivation, and general school readiness; to assess the effects of teacher attitudes toward curriculum structure on effects of preschool programs; to describe a baseline for followup of long-term effects; to investigate teacher and parental attitudes toward disadvantaged children as affecting student outcomes; to describe such student characteristics as health, ability level, and family support.

Subjects: One group of 360 and another of 180 preschool disadvantaged children randomly selected from approximately 750 eligible applicants.

Methods: First group assigned to 24 experimental classes in 10 centers throughout a midwestern city. Second group of 180 assigned to classes on basis of attitude toward curriculum structure. Dependent variables are specific and general language abilities and social adjustment behaviors. Analysis includes a two by two factorial design with six replications employing analysis of variance and multiple regression procedures.

Duration: August 1967-August 1969.

Investigator(s): Edsel L. Erickson, Ed.D., Center for Sociological Research, Western Michigan University, Kalamazoo 49001; Joseph McMillan, Supervisor, Inner City Schools, and Jane A. Bonnell, Ph.D., Director of Evaluation Services, Grand Rapids Public Schools, Grand Rapids, Mich.

Cooperating group(s): U. S. Office of Economic Opportunity.

23-QE-10 TEEN TUTORIAL PROGRAM TO MEET THE DEVELOPMENTAL NEEDS OF DISADVANTAGED CHILDREN IN THIS AND FUTURE GENERATIONS

Purpose: To educate young teenagers in human development and family living so that they will be better able to meet their developmental needs in the years immediately ahead, and to adequately meet the needs of their children later in life when they become parents.

Subjects: 20 boys and 20 girls enrolled at Finland Junior High School, and 48 children in kindergarten at Finland Elementary School; control groups.

Methods: Forty seventh grade boys and girls meet daily in groups of 20 for a course in personal and social development integrated with guided observation and well-planned and closely supervised tutorial experiences with kindergarten children. Both standardized tests and specially developed instruments are administered, analyzed, and interpreted.

Findings: Indications are that many seventh graders have gained more favorable impressions of themselves and have shown growth in recognition of individual differences in children, improvement in social relationships, and development of better means of coping with stress. Kindergarteners have benefited from additional help.

Duration: Summer 1966-August 1969.

Investigator(s): Jay Lowe, Ph.D., Research Associate, Department of Sociology, Ohio State University, Columbus, Ohio 43210. (Reported by Gene Telego, Supervisor, Teen Tutorial Project, 1825 Finland Ave., Columbus 43223.)

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

Publications: Evaluation report on first phase of Teen Tutorial Program available August 1968.

23-QE-11 LONG-RANGE EFFECTS OF A LANGUAGE STIMULATION PROGRAM UPON NEGRO EDUCATIONALLY DISADVANTAGED FIRST GRADE CHILDREN

Purpose: To conduct a followup evaluation of an experimental program's effect on the intelligence, linguistic abilities, and reading ability of disadvantaged children.

Subjects: 32 educationally disadvantaged first grade Negro children who received the experimental treatment lessons from the Peabody Language Development Kit.

Methods: A battery of tests was readministered to the children and a comparison made between immediate posttreatment scores and a delayed posttest administered approximately one year following the end of the program.

Duration: October 1966-April 1967.

Investigator(s): Dr. John L. Carter, University of Houston, Houston, Tex. 77004.

Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-QE-12 INCREASING CHILDREN'S ACHIEVEMENT-ORIENTED BEHAVIOR IN NURSERY SCHOOL

Purpose: To determine whether the volume of achievement-oriented behavior demonstrated by urban nursery school children can be heightened through short-term training.

Subjects: 13 matched pairs of Head Start children, ages four and five; their parents.

Methods: During the second and third weeks of March, the mothers met for nine hours in three sessions during which (a) the purposes of the research project were given, (b) the findings of Rosen regarding the childtraining behavior of mothers of sons with high achievement motive were explained in lay terms, and McClelland's film "Need for Achievement" was shown, and (c) the techniques of helping a child carry out achievement-oriented behavior were demonstrated and practiced. From the last week of March until the third week of June, the achievement training was administered to the children in the experimental group. Each school day they came to a room in the Center prepared especially for the training, while their classmates were in recess from the regular Head Start activities. Thirty minutes each day, for 51 days, an experienced nursery school teacher and her graduate student assistant, both trained in the theory and practice of assisting children to accomplish achievement-oriented behavior, administered four types of treatment: (a) the two women acted as mothers who help children set achievement goals of moderate risk, (b) they used language helpful to achievement in their conversations with the children, (c) they conveyed feedback from task efforts to the children, and (d) they gave reinforcement for success in goal achievement and arranged group support among the children. Further research with similar short-term input is planned on larger groups of children who demonstrate no more than a moderate level of achievement-oriented behavior at the outset, using a more sensitive instrument refined during the present study.

Findings: Use of two measures of achievement-oriented behavior showed statistically insignificant changes by the experimental group when compared with a control group of thirteen closely matched Head Start children.

Duration: February-June 1968.

Investigator(s): Eugene H. Stivers, Ph.D., Associate Professor and Chairman, and Surang Kowatrakul, Ph.D., Associate Professor, Department of Educational Psychology, Temple University, Philadelphia, Pa. 19122.

Cooperating group(s): Temple University Center for Head Start Research and Evaluation; Philadelphia Head Start.

Publications: Copy of report available from Dr. Stivers.

23-QE-13 YPSILANTI PRESCHOOL CURRICULUM DEMONSTRATION PROJECT

Purpose: To compare impact of three basic preschool curriculum styles in a regular public school setting.
Subjects: Disadvantaged and functionally retarded children, ages three to five, randomly assigned to one of three groups.
Methods: The three styles employed are the unit-based traditional nursery program, the cognitively oriented curriculum developed during the last five years of the Ypsilanti (Perry) Preschool Project, and the Language Training program developed by Bereiter-Engelmann.
Findings: The results parallel the expectation of diverse studies. The initial I.Q. gain is directly related to the degree of teacher intensity and language use.
Duration: September 1967-February 1971.
Investigator(s): David P. Weikart, Ph.D., Director, Special Services, Ypsilanti Public Schools, 300 W. Forest, Ypsilanti, Mich. 48197.
Publications: Initial Results of a Comparative Preschool Curriculum Project, D. P. Weikart and R. Weigerink; additional materials such as video tapes, 16mm. films, and reports will be produced during the course of the project; final report.

23-QE-14 REALIZING THE POTENTIAL OF UNDERPRIVILEGED YOUTH

Purpose: To survey the social sources of achievement of low income youth; to study the effects of different kinds of client participation in educational programs upon program results.
Subjects: 4,077 secondary school students and members of 1,600 households in the community; seventh grade students and preschool children, age four, and their parents.
Methods: A sample survey of the secondary school students provided information on school, family, and neighborhood experiences, educational and occupational values and aspirations, and various psychological dimensions. Survey of households was concerned with perceptions of and experiences with public institutions, family life, occupational experiences, race relations, and other topics relevant to the socialization of youth. Field study involved the operation of a study hall for seventh grade students and two sessions of parent-participant preschool programs for four-year-olds. Measurements were made of the skills and behavior of the students, and of the parents' socialization practices and knowledge of child development. Interviews, structured observations, and process reports were used to gather information on client participation in the program and the effects of varying institutional aegis upon program outcomes.
Duration: April 1967-March 1968.
Investigator(s): Alan B. Wilson, Associate Professor of Education, University of California (present address: Blythe Cottage, Piddinghoe, Newhaven, Sussex, England), Charles Y. Glock, Ph.D., Professor of Sociology, and Ralph Kramer, Ph.D., Assistant Professor of Social Welfare, University of California, Berkeley, Calif. 94720.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Final report in preparation.

23-QG-1 ORGANIZATIONAL PROBLEMS IN ENROLLING HARD-CORE YOUTH AND IN CREATING ATTITUDE CHANGES IN THE HOUSTON NEIGHBORHOOD YOUTH CORPS PROJECTS

Purpose: To examine the impact of Neighborhood Youth Corps operating procedures on enrollees; specifically, to identify problems of enrollee

recruitment; to determine the effectiveness of the NYC program in developing motivation and positive attitudes toward learning among enrollees; to assess the relationship between NYC wage incentives and enrollee recruitment and morale. In addition, the project will study the internal organizational problems of sponsoring agencies and problems affecting the relationship between sponsoring agencies and institutions accepting NYC enrollees.
Subjects: Enrollees in two out-of-school and three in-school NYC projects in the Houston metropolitan area.
Methods: Data are collected through observation of the social interaction and behavior of NYC staff, enrollees, and job supervisors, with emphasis on one in-school and one out-of-school project; informal interviews with staff and enrollees; formal questionnaire interviews with a sample of enrollees from each project to determine whether their work experience has brought about attitude change. Additional data are collected from Houston NYC agency files and from other studies on NYC operations.
Duration: Not reported-September 1968.
Investigator(s): Edwin S. Harwood, Ph.D., Department of Sociology and Anthropology, Rice University, Houston, Tex. 77001.
Cooperating group(s): Manpower Administration, U. S. Department of Labor.

23-QG-2 SPECIAL EDUCATION VOCATIONAL REHABILITATION PROJECT (SEVR)

Purpose: To discover and demonstrate ways in which the employability characteristics of a population of urban retarded and disadvantaged youth could be upgraded; to evaluate the relative effectiveness of close interagency functioning of Public School Special Education and the State Division of Vocational Rehabilitation as the two agencies which provide intensive supportive services to these youth.
Subjects: 15-year-old mildly retarded disadvantaged Negro and white males and females enrolled in Special Education programs for the educable mentally retarded in Detroit inner-city schools. Subjects were divided into experimental and control groups, each comprising seven Negro males, four white males, three Negro females, and two white females.
Methods: Experimental and control groups were selected at random every four months for entry into the program. Each youth was assigned to a rehabilitation counselor who coordinated and planned for appropriate services to both client and family while client participated in three major program phases over a 16-month period. The first phase consisted of eight months of instruction in personal, social, and academic skills, and practical training in a simulated industrial setting where students were paid on a piecework basis for performing different kinds of work. During this phase the students received group counseling and observed a variety of workers. Phase II consisted of concentrated prevocational appraisals by way of work sample, testing instrument, and an initial community work experience which was nonsuccess oriented. Client reactions to these first community work experiences were carefully evaluated by employers, staff members, and clients themselves. The final phase constituted On-The-Job Training (OJT) for 13 to 20 weeks, followed by placement in full-time employment. Both placement agent and rehabilitation counselor continued to give support and guidance for 30 to 90 days following placement. Experimental and control subjects were interviewed at ages 17 and 18 to determine subjects' early past-project experiences as well as inproject changes.
Findings: Questionnaires completed by employers and parents and test and scaled evaluations of the clients indicate effectiveness of the program.
Duration: February 1962-January 1967.
Investigator(s): Denny Stavros, M.A. (Ph.D. Candidate), Research Coordinator, Jamesetta Colbert and Ruth Copeland, Teachers, Detroit

Public Schools; Allan Kobernick, B.S., Wayne State University, Detroit, Mich., and others. (Reported by Eugene Straley, Principal, Detroit Special Education Vocational Rehabilitation Project, 2918 Rivard St., Detroit, Mich. 48207.)
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Final report, June 1967.

23-QG-3 IMPROVED OPPORTUNITIES FOR DISADVANTAGED YOUTH THROUGH VOCATIONALLY ORIENTED EDUCATION

Purpose: To generate an effective vocationally oriented educational program that will enable economically and socially handicapped rural youth to prepare themselves for gainful employment and to utilize their developing vocational competence to improve the economic and social situation in their depressed rural communities.
Subjects: 116 rural families, chosen at random from 10 Illinois communities, having 524 children living at home, living on an acreage of land, and having incomes of less than $3,000.
Methods: Initial phases involve a study in depth of a typical depressed rural community and its inhabitants to identify the anthropological, economic, psychological, and sociological conditions and trends that typify the area. Following this, a model preparatory and supplemental vocational program will first be applied in a single community and then in five communities and evaluated in terms of processes used and results obtained.
Duration: July 1965-June 1970.
Investigator(s): Lloyd J. Phipps, Ed.D., Professor and Chairman, Division of Agricultural Education, and Gerald R. Fuller, Ed.D., Assistant Professor, Department of Vocational and Technical Education, University of Illinois, Urbana, Ill. 61801.
Cooperating group(s): Center for Instructional Research and Curriculum Evaluation (CIRCLE), University of Illinois; Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Reports planned at conclusion of project.

23-QH-1 A PILOT APPROACH TO THE EDUCATION OF FIRST GRADE PUBLIC SCHOOL CHILDREN WITH PROBLEMS IN BODILY SCHEMA, PERCEPTUAL-MOTOR AND/OR LANGUAGE DEVELOPMENT

Purpose: To investigate the effects of class grouping, selected curriculum techniques, and training in bodily and spatial schema.
Subjects: 50 first grade children.
Methods: Subjects were placed in three self-contained classrooms: an experimental class with 12 children identified as having problems with bodily and spatial schema was given special techniques and training; a control class of 6 children with problems and 12 without was given a traditional curriculum; and an experimental class of 24 children without the problems was given a traditional curriculum. Experimental and control classes were closely matched. Modifications of techniques developed in previous clinic research were adopted for use in a public school. Standard evaluative measures were taken in the fall and spring, and growth patterns in each class studied.
Duration: February 1966-not reported.
Investigator(s): Selma G. Sapir, M.A., Psychologist, Teachers College, Columbia University, New York, N. Y. 10027.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-QH-2 VISUAL LANGUAGE LEARNING PROCESSES IN DEAF CHILDREN

Purpose: To enhance the reading process in the deaf child; to demonstrate the value of simultaneous presentation of the speech-read and printed work form in the reading process; and to demonstrate the value of individual attention and more creative use of time by teachers permitted by use of teaching machines and films.
Subjects: 60 deaf children; control group.
Methods: A film, simultaneously presenting the speech-read and printed work form, is shown to subjects in a series of 10 presentations; a post-test will assess learning. Programmed learning and an automated teaching machine are used to determine the efficiency of these media. Findings from experimental and control groups are compared to establish the efficacy of the approach.
Duration: June 1966-1968.
Investigator(s): Helmer R. Myklebust, Ed.D., Director, Institute of Language Disorders, Northwestern University, Evanston, Ill. 60201.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.

23-QH-3 COOPERATIVE PROJECT FOR PREGNANT SCHOOL GIRLS

Purpose: To provide continuing education and health and social services for pregnant girls who leave school because of pregnancy and continue to live in the community; to study the psychosocial problems of adolescent pregnant girls, their family situations and plans for the baby, and their response to continuing education and instruction in health and infant care, and group counseling.
Subjects: Married and unmarried pregnant school girls in Durham, N. C.
Methods: Initially, 16 girls were selected to take part in a program planned and conducted by the Durham Community Planning Council. In the selection process, semistructured interviews were conducted with 70 girls, their parents, and putative fathers; conferences were held with schools and referring agencies; minutes of staff conferences on individual girls and on the group were taken, and medical and academic records were gathered. In next phase, program of education and health and social services is to be enlarged.
Duration: July 1967-July 1971.
Investigator(s): Maurine LaBarre, M.S.W., Social Work Research Consultant, Education Improvement Program of Durham; and Assistant Professor of Psychiatric Social Work, Division of Child Psychiatry, Duke University Medical Center, Durham, N. C. 27706.
Cooperating group(s): Office of Education, U. S. Department of Health, Education, and Welfare.
Publications: Ongoing evaluations and reports will be prepared and available as the project proceeds.

SOCIAL SERVICES

23-RA-1 NATIONWIDE EVALUATION OF CHILD CARE SERVICES

Purpose: Based on the assumption that the provision of child care services for children from economically deprived backgrounds will undergo considerable expansion in the near future as a result of current political realities and professional trends, this study is intended to: monitor the response of public and private social service systems throughout the United States to the child care provisions in the recent amendments to the Social Security Act; study the short- and long-term effects and consequences of child care services actually delivered in selected states and communities on children and families and on the social well-being and economic development of communities; design systems for routine monitoring of the operations and performance of child care services in order to provide feedback geared to in-process quality control of child care services, ascertain and evaluate relevant effects and consequences of services, and conduct cost-benefit analyses of these services.
Methods: Contacts with state welfare and other relevant governmental systems, regional offices of the Department of Health, Education, and Welfare, and private organizations interested in child care services on state, regional, and national levels will be used to monitor responses to the Social Security amendments and to study the effects and consequences of child care services. Monitoring system is planned on a nationwide level, while the effects and consequences of day care services will be studied in sample communities. Systematic topical interviews with samples of consumers, potential consumers, and providers of child care services and with individuals representing various groups having an interest in these services will provide information on overt and covert philosophies, objectives and expectations, and proposed and actually used means for achieving these objectives. Development of research tools for monitoring, quality control, and evaluation models will be based on the nationwide monitoring operation and the evaluative studies in sample communities.
Duration: 1967-1972.
Investigator(s): David G. Gil, D.S.W., Associate Professor, and Herbert J. Hoffman, Ph.D., Assistant Professor, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Mass. 02134.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RB-1 CLIENT ORIENTATIONS AND ATTITUDES: AN EXPLORATION INTO COORDINATED SERVICE PROGRAMS

Purpose: To explore the possibility of designing service programs which will more closely approximate clients' preservice orientations and consequently yield better results.
Subjects: 46 boys selected from a cluster of boys of similar orientation and background.
Methods: Boys are cross-classified through various scaling devices and measurement techniques. Various measures of association are used for ordinal level scales, and selected tests of significance are administered.

Findings: Those clients who conceived of the services as being commensurate with their orientation before services significantly reduced their acting out behavior in school and in the community, while incongruent orientations and service clients increased such behavior.
Duration: Spring-August 1967.
Investigator(s): Clyde W. Franklin, Jr., M.A. (Ph.D. Candidate, University of Washington), Research Assistant, Atlantic Street Center, 2103 S. Atlantic St., Seattle, Wash. 98144.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Will probably publish; report available from Atlantic Street Center.

23-RB-2 USE OF WELFARE AIDES IN A CHILD WELFARE AGENCY

Purpose: To assess the effects of assignment of welfare aides to different levels of responsibility on the quantity and quality of agency service to individual cases; to permit conclusions to be drawn about the upper limit of responsibility of welfare aides.
Subjects: 10 - 12 aides employed at the Children's Aid Society, Vancouver, B. C.
Methods: A large number of cases of various types are assigned, with welfare aides assuming different levels of responsibility on different cases. Measures of service quality, task performance, and client outcomes will be devised and applied using different experimental groups.
Duration: May 1967-September 1969.
Investigator(s): John A. Crane, Ph.D., Associate Professor, School of Social Work, University of British Columbia, and Louis E. Reimer, M.S.W., Research Assistant, Children's Aid Society, Vancouver, British Columbia, Canada.
Cooperating group(s): Welfare Grants Division, Department of National Health and Welfare, Canada.

23-RB-3 MAINTENANCE AND INNOVATION IN PRIVATE YOUTH WELFARE AGENCIES

Purpose: To assess the degree to which differences in innovation among private youth welfare agencies may be accounted for by differences in their organization structure; to determine the effects of mergers of welfare agencies, particularly on their clientele.
Subjects: 12 agency executives in Chicago, each one of whom represents a large merged complex of agencies.
Methods: During a pilot study, agency executives were interviewed, and historical records and budgets of the agencies and census records of agency areas were surveyed in order to answer the following questions: What are some of the socioeconomic conditions which facilitate mergers? What are some of the differential consequences of agency mergers on the agencies themselves, their clientele, and on the institutional organization of welfare services in the communities of which they are a part?
Findings: Welfare agencies are among the last institutions in our society to be affected by bureaucratic processes, one consequence of which is merger activity. Other pilot findings will be used to plan a more systematic investigation.
Duration: October 1965-continuing.
Investigator(s): Lawrence H. Streicher, Ph.D., Senior Research Associate, and Emil Peluso, B.S., Research Associate, Institute for Juvenile Research, 232 E. Ohio St., Chicago, Ill. 60611.
Publications: To be published in professional journals.

23-RB-4 TRAINING AND RESEARCH FACILITY IN CHILD WELFARE PRACTICE

Purpose: To test and initiate new approaches in program planning and services for the community, with particular emphasis on the welfare of children and experimentation in new methods of social work education towards more effective preparation for practice.
Methods: Under the professional direction of Case Western Reserve University's Field Work Department, a training and research facility has been established at a settlement house in a low income area of Cleveland. Educational approaches being tested include new patterns of preparation for practice across traditional social work method lines. Directions in service include those initiated through the facility itself and those brought to the community being served via other agencies, through the initiative of the facility. Program and educational directions will be systematically assessed.
Duration: July 1966-continuing.
Investigator(s): John B. Turner, D.S.W., Associate Dean and Professor, Case Western Reserve University School of Applied Social Sciences, Cleveland, Ohio 44106; and Ivor Kraft, Ph.D., Sacramento State College School of Social Work, Sacramento, Calif. 95819.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RD-1 POSTPLACEMENT FUNCTIONING IN ADOPTIVE FAMILIES: A FOLLOWUP STUDY OF ADOPTIONS AT THE CHILDREN'S AID SOCIETY OF PENNSYLVANIA

Purpose: To study the development of children adopted through Children's Aid Society of Pennsylvania as compared with natural children; to relate variables in the adoptive family and early living experience of the child to his present functioning.
Subjects: 100 adopted children, and 100 natural children selected from a public school system, all ages 10 to 15.
Methods: Longitudinal study will focus on the child's intelligence, school achievement, and personality functioning, fantasy material concerning adoption, and teacher's rating of the child's adjustment. Findings on these variables will be related to ratings made on the adoptive family in an earlier phase of the study. (See Research Relating to Children, Bull. No. 18-Y-3.)
Duration: August 1966-June 1968.
Investigator(s): Janet L. Hoopes, Ph.D., Chief Psychologist, Children's Aid Society of Pennsylvania, 311 S. Juniper St., Philadelphia, Pa. 19107. (Reported by Elizabeth A. Lawder, D.S.W., Executive Director, Children's Aid Society of Pennsylvania.)
Cooperating group(s): Graduate Department of Social Work and Social Research, Bryn Mawr College, Bryn Mawr, Pa. 19010.

23-RE-1 CHILD WELFARE RESEARCH PROGRAM

Purpose: To conduct a longitudinal study of foster care, including entry, child assessment, family, and agency studies.
Subjects: 624 children who entered foster care in 1966 and were cared for by New York City child welfare agencies; their families.
Methods: Entry study focuses upon factors determining how and where the children are routed in the child care system. Child assessment study involves psychological testing of the children, ratings of their behavioral characteristics, and profiles of their adjustment in various life space

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areas. Family study consists of field interviews with mothers and fathers of the children concerning circumstances leading to placement, parental feelings and attitudes, family functioning, and socioeconomic factors. Agency study involves telephone research interviews with caseworkers in agencies planning and caring for the children. Children who have been discharged to their own homes will continue to be studied, along with those remaining in care.
Duration: 1965-1970.
Investigator(s): David Fanshel, D.S.W., Professor, Columbia University School of Social Work, New York, N. Y. 10028.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RF-1 A WORK-RELATED CHILD DEVELOPMENT CENTER

Purpose: To meet the need and create a demand for good care for children of working mothers; to offer employment as an escape from poverty; to demonstrate the feasibility of a partnership between government, industry, parents, and educational institutions to meet a need which none of them could fully meet alone.
Methods: An all-day child development center was established in an industrial setting for children whose parents work nearby. The Center provides a comprehensive program for children and employs their parents. The effects of such a service on the parent-employees will be evaluated, and costs will be weighed against the measurable advantages to industry in cosponsoring such a program.
Duration: 1967-1970.
Investigator(s): F. Kate Bulls, M.Ed., Executive Director, Florence M. Bailey, B.S., Head Teacher, and George Gulick, Teacher, KLH Child Development Center, Inc., 30 Cross St., Cambridge, Mass. 02139.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RF-2 GROUP CARE OF INFANTS--A DEMONSTRATION PROJECT

Purpose: To demonstrate the dimensions of an optimum environment for daytime care of infants in a nursery center; to study the effect of group care on growth and development of infants; to describe a pilot course of training provided to the staff of the center, emphasizing the identification of tasks which can be performed by nonprofessional staff and the development of techniques for assessing the results of training; to document cost and related factors in the operation of adequate facilities for group daytime care of infants and toddlers.
Subjects: Infants and toddlers, ages 3 to 23 months; control group of similar children not enrolled at nursery center.
Methods: Daytime care includes health care and protection, satisfaction of emotional needs, encouragement of social interests, and an appropriately stimulating environment for intellectual growth and learning. Growth and development of infants enrolled in nursery center will be compared with that of control group being cared for in their homes by their own mothers in order to assess effects of group care.
Duration: 1965-1970.
Investigator(s): Mary E. Keister, Ph.D., Research Associate, Institute for Child and Family Development, and Frances Y. Dunham, Ph.D., Assistant Professor, Department of Psychology, University of North Carolina, Greensboro, N. C. 27412.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RH-1 EPIDEMIOLOGIC STUDY OF CHILD ABUSE--NATIONWIDE SURVEY

Purpose: To examine (1) incidence rates of child abuse in the U. S. population and in selected subsegments; (2) characteristics of individuals and families involved in child abuse; (3) circumstances surrounding and precipitating incidents of child abuse, including data on injuries; (4) patterns of health, welfare, and legal intervention measures, and their effects. For purposes of this study, child abuse is defined as "non-accidental physical attack or injury, from minimal to fatal injury, inflicted upon children by persons caring for them". (See Research Relating to Children, Bull. No. 19-RT-2.)
Methods: Every incident of child abuse reported in 1967 and 1968 throughout the U. S. in accordance with reporting legislation in all the states is channeled to the study through central registries set up during 1966 in each state. Standardized precoded instruments are used to describe each incident and the individuals involved. Every incident which occurred during 1967 in a representative sample of 38 cities and counties is subjected to a more intensive study and analysis by means of comprehensive, standardized, partially precoded research schedules. Prior to the 1967 and 1968 nationwide surveys a pilot study was conducted in California, and a nationwide public opinion survey explored knowledge about, and attitudes toward, physical abuse of children and the adults involved in such incidents.
Duration: July 1968-June 1969.
Investigator(s): David G. Gil, D.S.W., Associate Professor, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Mass. 02154.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Findings of the California pilot study and of the public opinion survey published in 1967; report on 1967 survey in preparation, 1968.

23-RI-1 A STUDY OF AFDC RECIPIENTS IN TWO MISSISSIPPI COUNTIES

Purpose: To evaluate effects of certain program variables furnished to selected AFDC recipients; to do basic research in the area of mobility potential of AFDC recipients.
Subjects: 200 AFDC recipients residing in two Mississippi counties.
Methods: Subjects are interviewed and then randomly assigned to four groups, three experimental and one control. Experimental programs of financial support, medical, dental, and social services, work training and experience, and basic adult education are made available to the experimental groups. At the end of one year, respondents are reinterviewed to measure the varying effects of the program variables.
Duration: July 1967-June 1969.
Investigator(s): J. S. Wittman, Ph.D., Sociologist, Social Science Research Center, Mississippi State University, State College, Miss. 39762. (Reported by Peggy J. Ross, Assistant Sociologist, Social Science Research Center.)
Cooperating group(s): Mississippi Department of Public Welfare.
Publications: Several reports, articles, and theses planned.

23-RI-2 ACHIEVEMENT MOTIVATION IN WELFARE YOUTH

Purpose: To investigate patterns of achievement motivation in welfare youth; specifically, (1) to determine the relationship between length of time on public assistance and level of achievement motivation; (2) to compare AFDC youth with non-AFDC youth with respect to achievement motivation; (3) to define the characteristics of achievement motivation in youth from different cultural backgrounds.
Subjects: 525 adolescents, ages 14 to 16.
Methods: Subjects are divided into four AFDC groups classified according to length of time on public assistance, and one quasi-control group of nonwelfare youth. Each group contains 35 Mexican-Americans, 35 Negroes, and 35 Anglos. Achievement striving and achievement performance are studied with a battery of measures including inventory type data, level of aspiration indices, semiprojective and projective measures. Subjects are processed individually. Analysis of variance is used to test for systematic variations in achievement motivation responses in relation to length of time on public assistance and influence of cultural grouping.
Duration: Not reported-1970.
Investigator(s): Edmund V. Mech, Ph.D., Professor of Social Work, Graduate School of Social Service Administration, Arizona State University, Tempe, Ariz. 85281.
Cooperating group(s): Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-RI-3 THE DISPOSITION OF SUSPECTED FRAUD CASES IN PUBLIC ASSISTANCE (AFDC)

Purpose: To investigate what happens to cases in which fraud is suspected; to assess the relationship of selected variables on the decision to prosecute suspected fraud cases; to obtain descriptive information on subjects.
Subjects: 81 AFDC cases which were referred by a public welfare department to the county's district attorney.
Methods: Retrospective analysis of case records.
Findings: Majority of cases are not prosecuted due to lack of court-admissible evidence; amount of money involved in suspected fraud is associated with decision to prosecute.
Duration: July 1967-January 1968.
Investigator(s): Paul Weinberger, D.S.W., Professor, San Diego State College School of Social Work, San Diego, Calif. 92115.
Cooperating group(s): San Francisco Department of Social Services; California State Department of Social Welfare.
Publications: Findings presented at National Conference on Social Welfare, San Francisco, May 1968. Publication pending.

HEALTH SERVICES

23-SD-1 STUDIES IN POSTNEONATAL MORTALITY IN NORTH CAROLINA

Purpose: To generate data upon which the Maternal and Child Health Section, State Board of Health, can develop new programs soundly directed toward the reduction of excess postneonatal mortality and morbidity in North Carolina; specifically, to determine those causes of postneonatal mortality which are amenable to intervention by health care.
Subjects: All mothers in North Carolina of children who died between the ages of 7 and 365 days during a period of one year; control group of mothers whose children have survived, matched on the basis of mother's age, race, birth weight of infant, age of infant, with the control group infant being born within one week of the study group infant, and geographic location in the state.
Methods: Interviews are held with the mothers of infants who have died and infants who have survived. No interview will be conducted sooner than 60 days after the death event.
Duration: July 1968-December 1969.
Investigator(s): Theodore D. Scurletis, M.D., Director, Personal Health Division, State Board of Health, Raleigh; Earl Siegel, M.D., Chairman, Department of Maternal and Child Health, and Bernard Greenberg, Ph.D., Chairman, Department of Biostatistics, School of Public Health, University of North Carolina, Chapel Hill, N. C. 27514.
Cooperating group(s): North Carolina Medical Society; North Carolina Pediatric Society.

23-SD-2 PRENATAL CARE PERSONNEL UTILIZATION PROJECT

Purpose: To design, implement, and evaluate the utility of a prenatal care program which seeks to make more efficient use of professional and nonprofessional clinic personnel with limited additional training in roles traditionally performed by more highly trained individuals.
Subjects: Population of a Maternity Care Research Clinic divided into experimental and control groups broadly matched by major variables.
Methods: Both groups are given care in accordance with presently accepted standards; control group receives care in the traditional manner and the study group in a manner modified to utilize professional and nonprofessional personnel most efficiently. Effects of traditional and modified programs of personnel utilization will be compared by health status of mother and infant; acceptance and utilization of care by the patient will be evaluated by her participation in the program and her expectations, perceptions, and degree of satisfaction; acceptance of their roles by clinic personnel will be determined by effectiveness of their performance and attitudes toward the clinic organization and patients. Functioning of the care systems will be evaluated by patient load, costs, efficiency and effectiveness of decisionmaking, and collection, processing, and transfer of information.
Duration: July 1968-June 1971.
Investigator(s): Edward R. Schlesinger, M.D., Professor of Maternal and Child Health, and Byron W. Wight, M.A., Assistant Research Professor of Maternal and Child Health, Graduate School of Public Health; Donald L.

Hutchinson, M.D., Professor of Obstetrics and Gynecology, and Willa D. Lowery, M.D., Assistant Research Professor of Obstetrics and Gynecology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15213.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SD-3 ANALYSIS OF PROGRAMS FOR PREGNANT ADOLESCENTS

Purpose: To analyze programs supported by the Children's Bureau serving adolescents who are pregnant out of wedlock.
Methods: Programs are being examined to identify the basis for measuring accomplishment, and the gaps in necessary data and current programming, and to make recommendations regarding both current and future programs supported by the Children's Bureau. Attention is focused on relating goals, service inputs, and administrative designs to outcome for both programs of prevention and programs of care for adolescents who are pregnant. A model will be developed to permit an evaluation of effectiveness if available information is found to be insufficient.
Duration: July 1968-continuing.
Investigator(s): John J. Dempsey, D.P.H., Assistant Professor, Division of Maternal and Child Health, Department of Population and Family Health, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Md. 21205.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SD-4 OPERATIONAL RESEARCH IN MATERNITY CARE OF ADOLESCENTS

Purpose: To investigate the efficiency and effectiveness of critical components of a maternity program for teenage girls at Magee-Womens Hospital.
Subjects: Teenage girls who have delivered at the Hospital.
Methods: Experimental design involves variation of characteristics of discussion and instructional groups in which subjects are enrolled. Two levels of exposure to program are achieved by terminating groups at either one or six months after delivery. Groups meet continously with either a medical or nonmedical leader, and visits within groups take place either once or twice a month. Effects of group treatment combinations will be measured in terms of objectives of the program including pregnancy outcome, postpartum health of mother and infant, avoidance of future pregnancies, adequacy of childcare practices, and continued patient education or vocational preparation. Experimental and outcome variable relationships will be controlled for background factors such as age, medical history, socioeconomic status, and family structure. Pre- and posttests will measure effects of group experience on changes in intervening variables of patient knowledge about and value attached to program objectives.
Duration: July 1968-June 1973.
Investigator(s): Edward R. Schlesinger, M.D., Professor of Maternal and Child Health, and Byron W. Wight, M.A., Assistant Research Professor of Maternal and Child Health, Graduate School of Public Health; Donald L. Hutchinson, M.D., Professor of Obstetrics and Gynecology, and Willa D. Lowery, M.D., Assistant Research Professor of Obstetrics and Gynecology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15213.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SD-5 STUDY OF PROGRAMS FOR UNWED TEENAGE MOTHERS

Purpose: To determine the impact of New Haven's Young Mothers Program, a hospital-based, comprehensive medical, social, and educational program for the teenage unwed mother, on the course of her pregnancy, and on the subsequent physical and psychological health and social development of both mother and child; specifically, to test hypotheses that (1) teenage unwed mothers who actively participate in the program will fare significantly better than similar girls enrolled in other prenatal care programs on a series of indicators including health during pregnancy, ease of labor and delivery, health in postpartum period, educational achievement, and familial and social relationships, and (2) infants of these mothers will be significantly healthier at birth and in the subsequent years, and will score significantly higher on indicators of physical and social development than will infants of similar mothers enrolled in other prenatal care programs.
Subjects: Pregnant teenagers participating in the Young Mothers Program at the Yale-New Haven Medical Center, contrasted with groups of pregnant teenagers receiving different patterns of care, primarily from interagency services for unwed mothers in Hartford.
Methods: A maximum of 60 girls is enrolled at one time, with intake continuing for two years. Girls are studied from registration through delivery and interviewed at 2, 13, and 24 months postpartum. Data are collected through clinical examination and observation of mothers and infants, social work interviews and observations, psychometric testing, home interviews, analysis of medical records,and review of records of other participating organizations. Characteristics of program participants which receive special attention include patterns of family living, incidence of mental subnormality, pregnancy among sisters in period preceding and following participant's pregnancy, interval between conceptions, feelings of alienation, and correlates of more or less active participation. Characteristics of program-eligible patients who decide not to participate in the program will also be studied.
Duration: July 1967-December 1972.
Investigator(s): James F. Jekel, M.D., Assistant Professor of Public Health, and C. Lee Buxton, M.D., Professor of Obstetrics and Gynecology, Department of Public Health, Yale University School of Medicine, New Haven, Conn. 06510. (Reported by Lorraine V. Klerman, D.P.H., Department of Public Health.)
Cooperating group(s): New Haven Board of Education; Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: *Health Education Monographs*, 1968; *American Journal of Public Health* 57:1308-1313, August 1967; *American Journal of Obstetrics and Gynecology*, forthcoming.

23-SD-6 DEVELOPMENT OF A COMMUNITYWIDE HEALTH INFORMATION SYSTEM TO ASSIST IN MATERNAL AND CHILD HEALTH PROGRAM PLANNING

Purpose: To determine the feasibility and cost of an ongoing health information system for homogeneous urban neighborhoods at different living levels, composed of geographic units smaller than census tracts.
Methods: Methodology is being explored and techniques developed for merging census small-area data with information from public health records, hospital obstetrical records, and supplementary health surveys. Standardized computer programs will be designed for tabulating, charting, and mapping data, and guidelines developed for use by other communities for relating local health data to small-area census data in 1970. These programs will be useful to administrators in their comprehensive health

planning for mothers, children, and their families in cities and SMSA's throughout the country.
Duration: July 1967-June 1969.
Investigator(s): Estelle Siker, M.D., Acting Director, Community Health Division, State Department of Health, Hartford, Conn. 06115.
Cooperating group(s): Census Bureau, U. S. Department of Commerce; Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SE-1 FAMILY PLANNING: CLINIC AND COST EVALUATION

Purpose: To provide information to administrators about the activities of family planning services and also, the relationships between resources devoted to family planning and the resulting outcomes.
Methods: Field studies are being conducted in about 50 cities in the United States. Initial phase involves research in both time/motion studies of procedures in family planning clinics and costs of the resources used.
Duration: July 1968-June 1969.
Investigator(s): Charles R. Dean, Ph.D., Acting Research Director, Joy G. Dryfoos, George Varky, and Cornelia Van Vleck, Planned Parenthood Federation of America, Inc., 515 Madison Ave., New York, N. Y. 10022.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SE-2 FAMILY PLANNING APPROACHES AMONG "HIGH RISK" FEMALES

Purpose: To evaluate various programmatic approaches to increasing and maintaining the proportion of females in a high risk group who become effectual and consistent in practicing family planning over a period of three to five years as a primary prevention of various illnesses and physical impairments.
Subjects: 6,500 poverty-level Negro females of childbearing ages.
Methods: Baseline data, including 1,400 items of information on a 1-in-10 sample from this population, are to be used in ascertaining which educational methods and clinic procedures are most effective in overcoming resistance to family planning, and in translating availability and accessibility of health services into the life styles and time patterns of the high risk population.
Duration: July 1968-June 1971.
Investigator(s): Clark E. Vincent, Ph.D., Director, Frank R. Lock, M.D., Medical Director, and Carl M. Cochrane, Ph.D., Professor of Psychology, Behavioral Sciences Center; and Fleetus Gobble, M.D., Assistant Professor of Obstetrics and Gynecology, Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, N. C. 27103.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.

23-SF-1 PATTERNS OF FAMILY FOLLOWUP

Purpose: To determine needs of children and their families served by a mental retardation clinic and to evaluate the effects of the clinic program.
Subjects: 100 mentally retarded children and their families served by the University of Virginia mental retardation clinic in Charlottesville, Va.

Methods: The diagnostic and followup process is assessed in terms of the families' problems and their experiences with the program. A structured precoded interview form documents family identification and circumstances, parental occupation and income, child's school experience, source of referral, family responses in terms of problems which concerned the family as contrasted with those presented to the clinic diagnostically, age of the child when problems were first noted and as contrasted to age of referral, help wanted and received, personnel parents thought were most helpful, and needs which remained after clinic evaluation and management. The followup interview form was completed 6 to 12 months after the initial interview of the clinic had been initiated.
Findings: The great majority of families received satisfactory services but reported many unmet needs. The importance of considering the families' presenting problems as a focal point of diagnosis and continuing management in counseling was demonstrated. Family characteristics of social class, source of referral and presenting problems were closely related to the families' expressed needs. The specific nature of severity of the child's mental retardation was less closely related to these needs. The importance of continuing diagnostic-therapeutic evaluation was emphasized.
Duration: 1966-continuing.
Investigator(s): Roger J. Meyer, M.D., M.P.H., Associate Professor of Pediatrics, Richard L. Stafford, Ph.D., Assistant Professor of Pediatrics, and Milton D. Jacobson, Ph.D., Assistant Professor of Educational Research, University of Virginia, Charlottesville, Va. 22901.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Several articles submitted for publication.

23-SF-2 A STUDY OF ADOLESCENT HEALTH IN HARLEM

Purpose: To obtain data on the physical and emotional health status of young adolescents in Harlem, to determine their medical care needs, and to contribute to more effective planning and delivery of health services for adolescents in such communities.
Subjects: Approximately 400 adolescents, ages 12 to 15, in a sample of households in a larger community health survey now being conducted in Harlem by Columbia University School of Public Health and Administrative Medicine.
Methods: Written consent by parents cooperating in the larger survey will be requested to conduct interviews at home and medical examinations at Harlem Hospital. The interviews will deal with attitudes and behavior relating to health; the examinations will be comparable to those being done in the nationwide U.S. Health Examination Survey of a somewhat older age group. Efforts will be made to ensure that the adolescents requiring further medical attention will get it; efforts will also be made to follow up on each case recommended for medical care in order to provide some accounting of its effectiveness.
Findings: Preliminary results suggest that a large proportion of adolescents examined have minor physical conditions amenable to treatment which had not previously been sought.
Duration: August 1968-July 1970.
Investigator(s): Eric Josephson, Ph.D., Assistant Professor, and Ann F. Brunswick, M.A., Research Associate, Division of Sociomedical Sciences, Columbia University School of Public Health and Administrative Medicine, New York, N. Y. 10032.
Cooperating group(s): Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare.
Publications: Publications planned.

23-SG-1 EMOTIONAL HEALTH OF CHILDREN IN THE FAMILY SETTING

Purpose: To obtain an estimate of the emotional health of children in Westchester County, N. Y., as a basis for mental health planning, and to examine parental attitudes toward professional help; to develop an instrument for identifying emotionally impaired children which can be used in other communities; to explore the relationship of the emotional health or impairment of children to a number of demographic and psychological characteristics of the family setting.
Subjects: A random stratified sample of 800 children, ages 3 to 18, selected from six representative areas in Westchester, urban, suburban and rural.
Methods: Mothers were interviewed in their homes, on the basis of an extensive semistructured questionnaire. Supplementary information was obtained from school records. Data collected on the study child were evaluated by one of the 11 participating psychiatrists, who rated the emotional health of the child and the family setting, in line with procedures developed and tested in a series of training workshops. All data are prepared for processing by computer and for statistical analysis.
Duration: June 1966-August 1969.
Investigator(s): Olga Rubinow Lurie, Ph.D., Project Director, Esther D. Wallach, Executive Director, and Laura Jensen, M.A., Research Assistant, Mental Health Association of Westchester County, 29 Sterling Ave., White Plains, N. Y. 10606.
Cooperating group(s): Westchester County public and parochial schools; Westchester County Planning Department and public agencies; National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.
Publications: Publication is planned as findings become available.

23-SG-2 COMPREHENSIVE MENTAL HEALTH SERVICE

Purpose: To establish a comprehensive mental health service program which will provide early identification, referral, and treatment for students with emotional problems; to establish a prevention and education program.
Subjects: Children in kindergarten through grade six, teachers, administrators, and parents.
Methods: School staff members are trained to understand the elements essential to promoting a favorable mental health climate in the classroom and to recognize when behavioral and emotional problems should be referred to the mental health service. Parents are assisted in dealing with such problems in the home environment. A prevention program seeks to eliminate some of the causes of emotional problems. Teachers participate in inservice programs and meet with consultants from the Nebraska Psychiatric Institute.
Duration: July 1966-June 1969.
Investigator(s): Kenneth D. Orton, Ph.D., and David Levine, Ph.D., Professors, Department of Educational Psychology and Measurements, University of Nebraska, Lincoln, Neb. 68505. (Reported by Martin Koolen, Coordinator, Mental Health Service, 7801 Cass St., Omaha, Neb. 68114.)
Publications: Publication planned in 1969.

23-SG-3 CAREER MOTIVATION STUDY AND RECRUITMENT PROJECT

Purpose: To test and evaluate several methods of motivating or interesting high school students in mental health and related careers; to identify,

test, and evaluate significant factors or key methods that influence students or play an important role in the career decisions or vocational choices of youth.
Subjects: High school sophomores.
Methods: Project is geared toward interesting high school youth in mental health careers at an early point in their educational process when career decisions or vocational choices have not been firmly crystallized. School guidance directors, counselors, faculty members, community leaders, and other individuals and organizations who play an important role in assisting students in their career decision processes are utilized, along with mental health personnel. Project promotes interest in vocations of the mental health field which do not require education or formal training as well as those which do. Such devices as career information, field trips, work experience, program observation, volunteer work, school club organization, community service club participation, etc. are utilized.
Duration: 1965-1971.
Investigator(s): William J. McGlothlin, Vice President, University of Louisville; Earl E. Staton, Executive Director, Anna E. Barker, Research Statistician, and Claude B. Tiller, Education Program Coordinator, Kentucky Mental Health Manpower Commission, P. O. Box 22234, Louisville, Ky. 40222.
Cooperating group(s): National Institute of Mental Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

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- Stillman College
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ARIZONA

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Vocational attitudes and training 23-DA-2, 23-HI-2, 23-LD-2, 23-NA-1, 23-NB-2, 23-OG-1, 23-QE-3, 23-QG-1--3, 23-RI-1, 23-SG-3
Vocational rehabilitation 23-QG-2
Volunteers 23-DB-3, 23-DH-7, 23-HJ-3, 23-JI-2. See also Nonprofessional workers.

Welfare aides 23-RB-2
Welfare services. See Social services.
Welsh children 23-GA-1
West Indies children 23-GC-3
Working mothers 23-RF-1
Work-study programs 23-QG-1, 23-QG-2

Youth councils 23-KK-2
Yugoslavian children 23-KS-7, 23-LF-2

RESEARCH NOTES

CENTER FOR RESEARCH AND ADVANCED TRAINING IN DEAFNESS REHABILITATION

The Center for Research and Advanced Training in Deafness Rehabilitation was initiated at New York University under the sponsorship of the Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare. The Center's program is organized around three main branches: Training, Research, and Consultation. In research, the major concern is with the field of human communication, programmatically designed for integrated studies of the multiple aspects of communication.

CHILD CARE INFORMATION CENTER

The Presbyterian Institute for Human Development, Inc. has established the Child Care Information Center. The Center will be concerned with the group care of children. Further information is available from Mr. George Perkins, Director of the Institute, Box 23309, Anchorage, Ky. 40223.

NATIONAL LABORATORY IN EARLY CHILDHOOD EDUCATION

The Office of Education, U. S. Department of Health, Education, and Welfare, has established a National Laboratory in Early Childhood Education, under which centers have been set up at seven colleges and universities. These centers will represent a diversity of philosophies and approaches to early childhood education. Research and development activities of the Laboratory will be coordinated by the Center at the University of Illinois (which is also one of the eighteen ERIC Clearinghouses referred to on the following page). Information on the National Laboratory may be obtained from Dr. James O. Miller, Director, National Coordination Center, 805 West Pennsylvania Ave., Urbana, Ill. 61801.

OTHER ABSTRACTING JOURNALS AND SERVICES

AFB Research Index, American Foundation for the Blind, 15 W. 16th St., New York, N. Y. 10011.

Child Development Abstracts and Bibliography, Child Development Publications, Society for Research in Child Development, Inc., Purdue University, Lafayette, Ind. 47907.

Communication Disorders, Information Center for Hearing, Speech, and Disorders of Human Communication, The Johns Hopkins Medical Institutions, 310 Harriet Lane Home, Baltimore, Md. 21205.

Digest of Neurology and Psychiatry, Institute of Living, Hartford, Conn. 06102.

Dissertation Abstracts, University Microfilms, Ann Arbor, Mich. 48103. (Gives synopses of U. S. doctoral dissertations with an annual index.)

dsh Abstracts, Deafness, Speech and Hearing Publications, Gallaudet College, Washington, D. C. 20002.

Epilepsy Abstracts, National Institute of Neurological Diseases and Blindness, Public Health Service, Building 31, Room 8A-03, Bethesda, Md. 20014.

Excerpta Criminologica, Excerpta Criminologica Foundation, Rapenburg 38, Leiden, The Netherlands.

Inventory of Social and Economic Research in Health, Health Information Foundation, 5555 So. Ellis Ave., Chicago, Ill. 60637.

Language and Language Behavior Abstracts (quarterly), Center for Research on Language and Language Behavior, University of Michigan, Ann Arbor, Mich. 48104. Annual subscription $22.50. Order from Subscription Manager, LLBA, Meredith Publishing Co., 440 Park Ave. S., New York, N. Y. 10016.

Listing of Health and Welfare Research Projects in Local Communities, United Community Funds and Councils of America, Inc., 345 E. 46th St., New York, N. Y. 10017.

Nursing Research, American Journal of Nursing Co., 10 Columbus Circle, New York, N. Y. 10019.

Nutrition Abstracts and Reviews, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland.

Poverty and Human Resources Abstracts (bimonthly), Institute of Labor and Industrial Relations, University of Michigan-Wayne State University, P. O. Box 1567, Ann Arbor, Mich. 48106. Annual subscription $40.00.

Psychological Abstracts, American Psychological Association, 1333 - 16th St., N. W., Washington, D. C. 20036.

Rehabilitation Literature, National Easter Seal Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago, Ill. 60612.

Research and Study Projects Reported by FSAA Member Agencies, Family Service Association of America, 44 E. 23rd St., New York, N. Y. 10010.

Sociological Abstracts, Leo P. Chall, 15 E. 31st St., New York, N. Y. 10016.

Through the Educational Resources Information Center (formerly the Educational Research Information Center), better known as ERIC, current research and research-related information will be made available to teachers, administrators, researchers, commercial organizations, and others. ERIC also includes eighteen clearinghouses, or documentation centers, located at universities and other institutions throughout the country. Each clearinghouse will concentrate on a different subject-matter area. More complete information may be obtained by writing to the Director of ERIC, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20202.

The Excerpta Medica Foundation, New York Academy of Medicine Building, 2 E. 103rd St., New York, N. Y. 10029, and 119-123 Herengracht, Amsterdam C, The Netherlands, has established an abstracting service on pediatrics on a yearly subscription basis. In addition to abstracts, the Foundation can provide to subscribers, at cost, photocopies and translations of complete articles.

The Human Relations Area Files have classified cultural data on primitive and non-primitive societies into 710 categories of human behavior. Complete sets of all files are available in 22 member institutions in the United States. For information, write to Dr. Clellan S. Ford, President, Human Relations Area Files, Yale University, New Haven, Conn. 06520.

The Minnesota Family Study Center can supply to interested scholars bibliographic information from the Inventory of Published Research in Marriage and Family Behavior. Requests for information should be addressed to the Director, Inventory of Published Research in Marriage and Family Behavior, Social Science Tower 1026, University of Minnesota, Minneapolis, Minn. 55455.

The Library of the National Easter Seal Society for Crippled Children and Adults has initiated a photoduplication service for persons engaged in rehabilitation research. It is available without charge to personnel in educational or research institutions and health or welfare agencies, public or private. This service hopes to provide the necessary professional literature not available in local libraries. Further information may be obtained by writing to the Librarian of the Society, 2023 W. Ogden Ave., Chicago, Ill. 60612.

The Science Information Exchange, Smithsonian Institution, 209 Madison National Bank Bldg., 1730 M St., N. W., Washington, D. C. 20036, provides to qualified investigators, on request, selected abstracts of current research supported by foundation or government grants. The Exchange covers such fields as medicine, nursing, public health, nutrition, psychology, education, anthropology, mental health, and intercultural relations.

The World Federation for Mental Health, 19 Manchester St., London W.1, England, operates a clearinghouse for research and study projects in the field of mental health.

The Library of the National Bureau for Child Welfare (Voor Kinderbescherming), Stadhouderslaan 150, The Hague, publishes abstracts of articles in the field of child welfare each month. These are in Dutch, but those familiar with the Universal Decimal System would be able to understand something about the article. The subscription rate for documentation on cards is 30 guilders (approximately $8.40).

In addition to these journals and services, many professional journals in such fields as pediatrics and mental deficiency include a section of abstracts regularly or once a year. There are also a number of indexes and abstracting journals in the medical area which occasionally refer to materials in the area of child development.

CHILDREN'S BUREAU
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE
WASHINGTON, D C. 20201

If you are currently engaged in research on children or their families, we would appreciate your cooperation in providing a short summary of your work for inclusion in the next issue of *Research Relating to Children.*

The Clearinghouse is the branch of the Children's Bureau which collects and disseminates information on current research relating to children and their families. Its purpose is to make such information available to research investigators and others concerned with research in child life.

The instructions on the third page of this form will serve as a guide for your summary. You will, of course, receive a free copy of the issue in which your study appears.

If you know of others doing research which might be of interest to the Clearinghouse, please give name(s) and address(es) below:

____

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Thank you for your cooperation.

INFORMATION SUPPLIED BY

Name ________________________________

Position ________________________________

Organization and address ______________________

____

____________________ ZIP CODE ________________

Form CB-200-C

Budget Bureau No. 122-R0021

SUMMARY OF RESEARCH PROJECT

TITLE:

PURPOSE:

SUBJECTS *(Sample)*:

METHODS:

FINDINGS TO DATE, IF ANY:

DATE PROJECT INITIATED:	ESTIMATED TERMINAL DATE:

PRINCIPAL INVESTIGATOR(S) ONLY:	DEGREE:	POSITION AND ORGANIZATION:

COOPERATING GROUPS *(In the research or in the funding of the research)*:

PUBLICATION REFERENCES AND/OR PLANS *(If no publication is planned, please indicate under what conditions data and results will be available)*:

IF THIS REPRESENTS WORK TOWARD AN ACADEMIC DEGREE, PLEASE STATE DEGREE *(Please do not report master's theses unless they represent work beyond a doctorate, as in dentistry)*:

BEST COPY AVAILABLE

INSTRUCTIONS

Please report studies in progress (or recently completed) which:

center on children or their families in such areas as child growth and development, intelligence, personality, education, social adjustment, family life, physical and emotional disorders, etc.

concern service programs in the fields of child health, child welfare, or special education

Please *DO NOT* report:

studies already reported to the Clearinghouse

purely medical studies limited to morphology or physiology, the physical aspects of etiology, epidemiology or symptomatology of diseases or handicapping conditions, surgery, chemotherapy, antibiotics or physical therapy; biochemical or other laboratory studies; animal studies

educational studies of curriculum construction or materials, teaching methods, surveys of school facilities or needs, general school administration studies

studies already published in sources generally available in major libraries across the country

demonstration projects, unless there is a formal plan for evaluation

studies of test development, standardization, or validation, except for special groups of children such as blind or retarded

regularly collected material such as annual reports, work preparatory to writing handbooks; directories; research based on secondary sources

master's theses, unless they represent work beyond a doctorate, as in dentistry

THE CHILDREN'S BUREAU
AND ITS
CLEARINGHOUSE FOR RESEARCH IN CHILD LIFE . . . .

The Children's Bureau was established in 1912 to "investigate and report. . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." From this beginning, the Bureau has extended its activities into such areas as developing standards of care for children and providing funds to States to improve conditions for children. More recently, the Bureau has established several new grants programs to support research in areas of maternal and child health and child welfare.

In keeping with the basic Act establishing the Bureau, the Clearinghouse for Research in Child Life was set up in 1948. Its function is to collect information about current research relating to children in order to make such information available for the use of investigators, administrators, program planners, and practitioners.

Investigators reporting a study to the Clearinghouse receive a free copy of the issue of *Research Relating to Children* in which their study appears. A free copy of each issue is also sent to directors of research centers and to libraries. In addition, the Clearinghouse maintains a mailing list of interested persons who receive announcements of new issues as they are published. Individuals may purchase copies from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The Children's Bureau Clearinghouse routinely exchanges information with the Science Information Exchange of the Smithsonian Institution. This organization is very helpful in providing abstracts of research supported by federal funds and by many foundations. The major source of information, however, is the individual research investigator, whose help is essential in obtaining the most complete and up-to-date coverage possible.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL AND REHABILITATION SERVICE

Children's Bureau Washington, D.C. 20201

Clearinghouse, Children's Bureau
U. S. Department of Health,
Education, and Welfare
Washington, D. C. 20201

The following investigators are doing research concerning children or services for children. Send report forms to obtain information.

Name ____

Address ____

__________________________________ Zip Code _______

Name ____

Address ____

__________________________________ Zip Code _______

Name ____

Address ____

__________________________________ Zip Code _______

Name ____

Address ____

__________________________________ Zip Code _______

Signed ______________________

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__________ Zip Code _______

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CLEARINGHOUSE PUBLICATIONS

Bibliography on the Battered Child, May 1966. Copies free from the Clearinghouse, Children's Bureau, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. 20201.

Research Relating to Emotionally Disturbed Children, 1968. A listing of studies reported to the Clearinghouse between 1956 and 1967, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office for $1.00.

Research Relating to Juvenile Delinquents, 1962 (reprinted 1966). A listing of studies reported to the Clearinghouse between 1948-1961, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office, Washington, D. C. 20402, for 35 cents. Do not send money to the Clearinghouse.

Research Relating to Mentally Retarded Children, 1966. A listing of studies reported to the Clearinghouse between 1948-1965, including publication references. Single copies free from the Clearinghouse; also available directly from the Government Printing Office for 65 cents. Do not send money to the Clearinghouse.

Research Relating to Children.* An inventory of abstracts of ongoing or recently completed research studies published once or twice a year. Single copies of the following issue are available without charge from the Clearinghouse. (Dates indicate period during which studies were reported to us.)

Bulletin II, Supplement 4 (February-November 1955)

The following issues are available for purchase directly from the Government Printing Office, at the prices indicated. Do not send money to the Clearinghouse.

Bulletin 18 (March-December 1964) - $1.25
Bulletin 19 (January-September 1965) - $1.50
Bulletin 20 (October 1965-May 1966) - $1.25
Bulletin 21 (June 1966-April 1967) - $1.25
Bulletin 22 (May-December 1967) - $1.00

All issues not listed above are OUT OF PRINT but are available in many libraries.

*An investigator receives a free copy of the issue of Research Relating to Children in which his study appears. A free copy of each issue is available to libraries and research centers. The Clearinghouse also maintains a mailing list of interested persons who receive announcements of new issues as they are published.